University of Southampton

Faculty of Environmental and Life Sciences

School of Psychology

The Complex Narcissist:

Narcissists' Use of Diverse Coping Styles in Times of Stress

By

Karlien Hindrika Wilhelmina Paas

Thesis for the degree of Doctor of Philosophy

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Abstract

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Narcissists are self-reliant, lack communal values, and in the long-term alienate others. Despite this they report high levels of well-being. Research to date, however, has been limited in examining whether these high levels of wellbeing extend to more stressful times. Despite narcissists' susceptibility to stress, there is a dearth of literature on how narcissists cope in times of stress. Research has suggested that social support is a helpful coping strategy when dealing with stress, however, due to their high agency and low communion, narcissists seem to challenge this link. This thesis addresses this gap in the literature.

The aims of this thesis were five-fold. Firstly, I examined narcissists' use of, and reasons for, using social support in times of stress. Secondly, I assessed a myriad of other coping strategies used by narcissists, and reasons for this use. Thirdly, I studied narcissists' use of different coping strategies on their psychological well-being. Fourthly, I examined whether the source of stress experienced (i.e., agentic, communal, environmental in nature) exacerbated or attenuated the use of, and reasons for using, various coping strategies. And, finally, I tested whether it is possible to change narcissists' behaviour using a self-

affirmation manipulation. In line with recent classifications, I answered these aims for four distinct subtypes of narcissism: Grandiose, adaptive, maladaptive, and vulnerable.

In three diverse online samples, utilising a range different research methods, I assessed how distinct subtypes of narcissism dealt with stressful situations. Across studies, I found that different types of narcissists used different coping strategies, and did so for different reasons. In Study 2, I found evidence for narcissists change in depression, but did not find evidence that this was based on their coping strategies. Furthermore, across studies, I found evidence that type of stressor sometimes impacts on narcissists' use of coping strategies. Moreover, I found that it is possible to change narcissists' behaviours using a short-term self-affirmation manipulation.

This research was the first one to test grandiose, adaptive, maladaptive, and vulnerable narcissists' use of coping strategies in times of stress. I used novel statistical methods to test this, and contributed to the literature in the stress, coping, and narcissism research, as well as found practical implications to change narcissists' behaviours.

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Research Thesis: Declaration of Authorship

Print name:	Karlien Hindrika Wilhelmina Paas

Title of thesis:	The Complex Narcissist: Narcissists' Use of Diverse Coping Styles in Times of Stress

I declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. None of this work has been published before submission

Signature:		Date:	

Acknowledgements

Every PhD is a journey and difficult for different reasons. I know from experience now that you cannot plan for some of the things that will happen during this journey, both within your PhD or within your personal life outside your PhD. I have said several times to people that my thesis should be (sub)titled “Life got in the way”, and despite life giving me an awful lot of curveballs to deal with, I managed to finish this journey successfully, and I have a lot of people to thank for this.

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Chapter 1 Literature Review – How Do Narcissists Cope with Stress?

1.1 Stress

"Everybody knows what stress is and nobody knows what it is." (Selye, 1973, p 692). More than four decades later, Selye's statement still rings true; stress has different meanings in different contexts. A lack of definition has led to a proliferation of concepts, making the literature on stress, coping-strategies, and health consequences immense. Therefore, it is important to establish early on in this PhD thesis how I define stress.

In some studies, stress is used as a synonym for what people find stressful (i.e., stressors), whereas in others it is a synonym for the perceived disturbance of homeostasis. However, these definitions are vague. Folkman and Lazarus (1988) used a more precise definition of stress as: "a situation that was difficult or troubling for you, either because you felt distressed about what happened, or because you had to use considerable effort to deal with the situation." Following this definition, I will refer to the *cause of stress* as *stressor*, or stressful situation, and to *stress* as the *outcome* or result of this stressor. Stress can be further characterised into *eustress* and *distress* based on whether it is positive or negative perceived stress (Selye, 1973). Throughout this thesis the term stress refers to distress.

Some researchers have attempted to cluster stressors into categories. For example Aldwin (2011) used the following classification: trauma (e.g., natural disasters, noise, pollution), major life events (e.g., marriage, divorce, moving house), job strains (e.g., promotion, deadlines), chronic stress (e.g., health issues), and daily hassles (e.g., traffic jams, household tasks). However, given that not everyone is exposed equally to these stressors or experiences the same levels of stress under similar stressors, this classification is limited. As such, it is important to understand individual differences in coping with

everyday stressors and their frequency or severity. Furthermore, some people live in areas where the occurrence of stressors, like a natural disaster, is relatively low. Thus, the above taxonomy may not be equally applicable across participants.

An alternative form of distinguishing stressors is based on the (personal) domain in which they happen: agentic, communal, and other (O'Brien & DeLongis, 1996). Agentic stressors happen within the intrapersonal domain, such as in a job or at school, and do not typically result from interpersonal interactions. Communal stressors are interpersonal in nature, and may result from interactions either with close others (i.e., close communal) or distant others (i.e., other communal). Other stressors entail external stressors that are not classifiable as agentic or communal. Given that almost everyone experiences intrapersonal and interpersonal situations regularly, I favour the above classification as opposed to one based on events that occur rarely (e.g., trauma), events that occur on a continuum (e.g., chronic stress), or minor events that occur frequently (e.g., daily hassles).

1.1.1 Stressors and Stress' Impact on People's Lives

The literature has shown that experiencing any form of stressor can lead to stress, and that stress is associated with poorer health, be it physiological or psychological in nature.

Common physiological responses to stressors include: elevated heart rate, cortisol level, alpha-amylase levels, blood-pressure, a strain on cardiovascular health, diabetes, and suppression of the immune system (Cohen, Miller, & Rabin, 2001; Cohen & Williamson, 1991; Hall, Cruser, Podawiltz, Mummert, Jones, & Mummert, 2012; Herbert & Cohen, 1993; Segerstrom & Miller, 2004; Selye, 1976). For example, Cohen, Tyrrell, and Smith (1991) investigated whether individuals experiencing more stress are more susceptible to the common cold. They found that people infected with a respiratory virus were more likely to develop a cold if they experienced high psychological stress, compared to those infected and experiencing low psychological stress. Controlling for differences in health

behaviours or personality variables did not alter their results (Cohen et al., 1991; Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997).

Short-term and long-term hormonal changes within the body can explain intrapersonal physical consequences. The first person to describe the short-term hormonal changes in the body following stress was Cannon (1932) with his fight-or-flight response. The fight-or-flight response refers to the two options that follow a threat or stressor: fight the threat or flee away from it. In later years, this response formed the basis of the Sympathetic-Adrenal-Medullary-axis (SAM-axis; Baum & Grunberg, 1997). The SAM axis explains the fight or fight response with an activation of the sympathetic nervous system (SNS), which stimulates the release of epinephrine and norepinephrine from the adrenal medulla. This release leads to heightened and extended SNS arousal (e.g., higher heart-rate, higher breathing rate, increased sweating; Baum & Grunberg, 1997). The long-term intrapersonal effects of hormonal changes in the body are explained via the Hypothalamus-Pituitary-Adrenal-axis (HPA-axis; Dickerson & Kemeny, 2004). Following long-term exposure to stressors, the HPA-axis is stimulated, resulting in the hypothalamus stimulating the pituitary gland, which secretes the adrenocorticotropic hormone, which in turn stimulates the adrenal glands to produce cortisol. This cortisol then dampens further stimulation of the hypothalamus and the anterior pituitary gland, ultimately mobilising energy stores and serving as anti-inflammatory hormones. In all, physical ailments result from both short-term and long-term hormonal changes.

Along with physical health, psychological health also suffers from stress experiences. Psychological stress originates when the demands of a situation exceeds the individuals' psychological resources (Lazarus & Folkman, 1984). Stressed people are more irritated, lack energy, experience low concentration, have difficulty relaxing, feel bad about themselves, feel overwhelmed, feel moody, are more vulnerable to burn-out, and are at risk for depression and anxiety disorders (Cohen, Janicki-Deverts, & Miller, 2007;

Hammen, 2005). Stress also precipitates the development of addictions (e.g., alcohol, drugs, cigarettes) and increases the likelihood of relapse (Brown, Vik, Patterson, Grant, & Schuckit, 1995; Sinha, 2008).

Experiencing stress not only has intrapersonal consequences, but can also have interpersonal and societal consequences. For example, stress that leads to mental and physical health problems, such as burn-out (Edwards & Burnard, 2003), or cardiovascular disease (Steptoe & Kivimäki, 2013), can result in financial costs for the individual (e.g., more medication), employers (e.g., pay sick leave and a substitute), and society (e.g., health care costs). A stressed person may start avoiding others, potentially resulting in relationship costs by losing friends or impairing family bonds. Due to these detrimental costs that stress can have on people's lives, both intra- and interpersonally, it is important to know *who* is susceptible to it, *how* to effectively deal with it, and *how* to minimise its consequences.

1.1.1.1 Measuring Stress

Stress can be measured subjectively or objectively, by using self-report questionnaires (e.g., Perceived Stress Scale; Cohen, Kamarck, & Mermelstein, 1983), behavioural measures (e.g., task performance under induced stressors), bodily responses to stressors (e.g., skin conductivity, heart rate, blood pressure), or biochemical markers (e.g., cortisol levels). In the last two decades there has been a shift in stress research from only using self-report questionnaires through the implementation of behavioural measures and bodily responses to also including biochemical markers. When combined, these measures will give an overview of the experienced (self-reported) psychological stress, and the physical (objectively measured) stress-responses. Each of the methods has its own strengths and limitations. A strength of self-reports is the convenience of data collection. The method is also appropriate when a researcher examines the relation between stress and psychological well-being, as subjective experience is relevant. A strength of physical

stress-response measures is their objectivity, as they allow recording without participants' interpretation. A weakness, though, is the difficulty in implementing them: It is much harder to collect physical stress responses, especially in a natural environment. As such, researchers are often forced to decide whether they are mostly interested in perceived stress or in bodily processes as a reaction to stressors.

In summary, stress can have harmful physiological and psychological health outcomes. I turn next to coping mechanisms that can help buffer against these outcomes.

1.1.2 The Role of Coping in Times of Stress

People respond to stressors in varied ways. For example, they may smoke a cigarette to calm their nerves, keep their feelings to themselves, lecture themselves, hope for a miracle, or seek help (Carver & Connor-Smith, 2010; Skinner, Edge, Altman, & Sherwood, 2003). The transactional model of stress (Lazarus & Cohen, 1977; Lazarus & Folkman, 1984) is a framework that explains both how stress originates in an imbalance between the environment and the individual, and what the relevant coping strategies are. According to this model, a person evaluates the threat following from the imbalance between the environment and the self (primary appraisal), and explores the coping strategies that can be used in this situation (secondary appraisal). When there are insufficient resources, these primary and secondary appraisals lead to emotional distress. To minimise this emotional distress of exposure to stressors (or perceptions thereof), coping strategies are necessary. The use of a specific coping strategy largely depends on type of stressor experienced, and the context in which it happened (Aldwin, 2011). Thus, to identify the most effective coping strategies or combination of coping strategies (i.e., coping style) in reaction to specific stressors (e.g., agentic, communal, external stressors), it is important to study stressful situations experienced, as well as individual differences in how to deal with these.

One widely used distinction between two overarching coping styles is between problem-focused and emotion-focused coping (Folkman & Lazarus, 1980). This distinction is based on the mental process that is involved in the coping strategy. When using problem-focused coping, people will directly face a stressful situation, and work hard to resolve it. This coping style aims directly at altering the source of stress. When using emotion-focused coping, people use mental or behavioural methods to deal with their distressed feelings, and try to change these feelings rather than changing the stressor. For example, if experiencing problems at work with a colleague, one could talk to the co-worker or the manager to attempt to resolve the issue (i.e., problem-focused coping). Another solution to the problem would be to try to avoid the source of stress (i.e., avoid the colleague), and thus bypass the distressed feeling that resulted from the problem with the co-worker (i.e., emotion-focused coping). In extreme cases, this may lead to quitting the job. According to Lazarus and Folkman (1984), people choose problem-focused coping over emotion-focused coping when they think they can change (or minimise) the stressor. However, in situations where people perceive the problem as being outside their control and thus hard to change, they prefer emotion-focused coping over problem-focused coping. This implies that, depending on the situation, people can be flexible in their use of coping strategies. Unfortunately, this also implies that the distinction between problem- and emotion-focused coping is problematic. Firstly, a specific coping strategy might be problem-focused in one situation, and emotion-focused in another (Lazarus, 1996). Secondly, this distinction is not exhaustive, give that there are additional types of coping. For example, appraisal focused coping, where the focus is on defining the situation by appraising and reappraising the situation before acting upon it (Skinner et al., 2003). As a result, this distinction has been fading away, with researchers progressively relying on alternative taxonomies, such as: acceptance, substance use, behavioural disengagement, use of social support, confrontive coping, and self-controlling (Carver, Scheier, &

Weintraub, 1989; Connor-Smith, Compas, Wadsworth, Thomsen, & Saltzman, 2000; Lazarus & Folkman, 1984; Skinner et al., 2003).

The breadth and complexity of coping is also visible when inspecting two widely used coping-questionnaires: the Ways of Coping Checklist (WOC; in either original or revised form; Folkman & Lazarus, 1980; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986) and the COPE Inventory in full or short form (Carver, 1997; Carver, Scheier, and Weintraub, 1989). The WOC and the COPE combined boast over 25000 citations (Google Scholar, 2 June 2019). However, not all these articles use the same subscales of these two questionnaires, and so comparing results is often problematic.

Skinner and colleagues (2003) identified more than 400 labels for coping styles, thus casting doubt on the pursuit of an ideal classification of coping styles. Schwarzer and Schwarzer (1996) argued that measuring coping is not only difficult because of conceptual issues, but also due to their instability over time (i.e., an appraisal of a situation needs to be carried out before choosing a coping strategy), the generalisability of coping strategies (i.e., it differs across situations), and the difficulty of classifying coping strategies into higher-order structures (e.g., problem-focused vs. emotion-focused coping). Yet, one coping style, the complex and multidimensional tactic of using social support (Skinner & Zimmer-Gembeck, 2007; Thoits, 1995; Uchino, 2006), is gaining traction in the literature.

1.1.2.1 The Role of Social Support as Coping Mechanism in Times of Stress

Social support is defined as the “process through which help is provided to others” (Feldman & Cohen, 2000; p. VII:373). Unfortunately, as with stress and coping, there is a lack of consensus on how social support should be studied, which has led to a diverse and incoherent literature on the topic. In most studies, a definition of social support is lacking. Over three decades ago, Barrera (1986) stated that: ‘global concepts of social support should be abandoned in favor of more precise concepts’ (p. 413). He started with a more specific conceptualisation by dividing social support into three categories: social

embeddedness, perceived social support, and enacted social support. Social embeddedness (i.e., social connectedness) focuses on the quantity and quality of social ties. Perceived social support refers to the appraisal of the received social support. Enacted social support refers to the actually received social support.

Additional conceptualisations of social support have emerged. For example, a distinction was made between giving social support, receiving social support, and perceived social support (Heitzman & Kaplan, 1988; Wethington & Kessler, 1986). Giving social support refers to what the support-giver thinks they provide. The other two subtypes are similar to Barrera's (1986) classification. Received social support is similar to his definition of enacted support, whereas perceived social support is the support perceived by the receiver of the social support. Importantly, although perceived support might differ from actually given or received support, these perceptions can affect coping and well-being.

Indeed, it is not the *actual*, objectively received availability of social support that is important, but rather the *perceived* availability of it, which can reduce psychological stress (Haber, Cohen, Lucas, & Baltes, 2007) or pain (Brown, Nesse, Vinokur, & Smith, 2003; Coan, Schaefer, & Davidson 2006). Additionally, the perceived availability of social support is relatively stable over time and situations (Barrera, 1986; Cohen, Gottlieb, & Underwood, 2000; Cohen & Wills, 1985; Lakey & Cohen, 2000), whereas actual received support and use of social support depend highly on the situation (Uchino, 2009). Therefore, this literature review, and the studies I report, focused mainly on perceived (availability of) social support along with the functions of social support when dealing with stressful situations. Several researchers have addressed the link between social support and health. For example, Cohen and Wills (1985) found evidence for a buffering hypothesis of social support, meaning that the perceived availability of social support can moderate the link between stress and harmful consequences of psychological distress. People who believe

that support is available to them cope more effectively with stressful situations than those who perceive it as unavailable (Cheng, et al, 2014; Cohen & Wills, 1985; Fallatah & Edge, 2015; Folkman & Moskowitz, 2004; Lakey & Cohen, 2000; Major, & Cozzarelli, 1992; Sarason, Levine, Basham, & Sarason, 1983).

Social support can also be classified into four functional subtypes: instrumental, informational, emotional, and esteem support (House, 1981; Nurullah, 2012; Schwarzer & Schultz, 2000). *Instrumental* support is practical help, and involves the provision of tangible aid and services that directly assist a person in need. *Informational* support is the provision of advice, suggestions, and information that a person can use to address problems. *Emotional* support involves the provision of empathy, love, trust, and caring. *Esteem* support (i.e., appraisal support) involves the provision of information that is useful for self-evaluation purposes – in other words, constructive feedback, flattery, reassurance, and affirmation. This distinction into four subtypes of social support is meaningful, because the context in which people use social support might define which type of social support is used. Furthermore, I find it worthwhile to investigate whether support is available or sought, and whether the focus of this availability and/or seeking of social support refers to a particular subtype of support.

1.1.2.2 Measuring Social Support

Perceived social support is mainly assessed using self-report questionnaires, and is therefore subjectively measured. Social support measures can focus on the social network of which the person is part (i.e., quantity: the number of people who can be asked for support), on the type of social support someone perceives (i.e., depending on what subtype is involved), or on a distinction between actual and perceived social support. Although the development of social support measures originated in research on coping with health issues (e.g., the Berlin Social Support Scale was developed for coping with cancer; Schwarzer &

Schulz, 2000; Schulz & Schwarzer, 2003), these measure have since been administered in non-clinical settings as well.

1.2 Susceptibility to Stress and Ensuing Coping

Individual differences can explain alterations in the occurrence of stressful life events (i.e., selection effect; Roberts et al., 2008; Specht et al., 2014). Also, the occurrence of these stressful life events predicts individual differences (i.e., socialisation effect; Roberts et al., 2008; Specht et al., 2014). Research looking to capture variability in experiencing, and coping with, stress has mostly relied on the Big Five Personality traits (agreeableness, extraversion, neuroticism, conscientiousness, and openness to experience). In a longitudinal study, Lüdtke, Roberts, Trautwein, and Nagy (2011) examined the relation between continuity and change in the Big Five Personality traits. They followed young adults in the transition from high school to university or vocational work, and found links between personality characteristics and occurrence of life events. People scoring high on extraversion and conscientiousness experienced more positive than negative life events, with negative life events predicting less extraversion. Whereas individuals scoring high on openness reported both positive and negative events, there was almost no change in levels of openness resulting from such experiences. Neuroticism predicted higher occurrence of stressful events, which in turn predicted higher neuroticism. Finally, agreeable people were more likely to experience positive events and this predicted an increase in agreeableness.

Research has also revealed correlations between personality on the one hand and coping and social support on the other (Connor-Smith, & Flachsbart, 2007; O'Brien & DeLongis, 1996; Swickert, Rosentreter, Hittner, & Mushrush, 2002). In a meta-analysis on relations between coping and personality, Connor-Smith and Flachsbart (2007) found that the Big Five Personality traits predicted use of specific coping-strategies. In their meta-analysis, they also focused on different coping styles, but only distinguished between three types of seeking social support: emotional, instrumental, or mixed social support. The

results indicated positive correlations between extraversion and use of emotional social support; extraversion and mixed social support, neuroticism and emotional social support; and agreeableness and mixed social support.

In a more recent study, Swickert, Hittner, and Foster (2010) examined bivariate associations between the Big Five Personality traits and perceived availability of social support. Hierarchical regressions revealed that extraversion was a significantly positive predictor, and neuroticism a significantly negative predictor, of overall perceived social support. Furthermore, there were differences between overall perceptions of social support and a breakdown into subtypes of social support. Therefore, it is important to distinguish between different types of social support and draw comparisons between them.

1.2.1 Narcissism

A relevant, but unexplored, personality variable is narcissism. Despite reporting high psychological wellbeing (i.e., high self-esteem and happiness, low depression and anxiety; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004; Zuckerman & O'Laughlin, 2009), narcissists are prone to stress. Narcissism, for example, is linked to elevated cortisol levels, which is a manifestation of a chronically-activated stress response system (Cheng, Tracy, & Miller, 2013; Edelstein, Yim, & Quas, 2010; Reinhard, Konrath, Lopez, & Cameron, 2012; Rhodewalt & Morf, 1995). Furthermore, narcissism (controlling for depression) predicts the occurrence of stressful life events (i.e., a selection-effect), whereas stressful life events do not change narcissism (i.e., a socialisation effect; Orth & Luciano, 2015).

I am concerned with two broad dimensions of narcissistic personality: grandiose and vulnerable (Thomaes, Brummelman, & Sedikides, 2018). Grandiose narcissism is a multifaceted anti-social personality trait, comprising a focus on agency (e.g., power, uniqueness, self-aggrandisement) and a lack of communion (e.g., disagreeableness, entitlement, exploitativeness; Campbell & Foster, 2002; Rhodewalt & Morf, 1995;

Roberts, Woodman, & Sedikides, 2018; Sedikides & Campbell, 2017). People scoring high on this personality trait care more about getting ahead than getting along (Bradlee & Emmons, 1992). Contrastingly, vulnerable narcissism is characterised by low self-esteem, neuroticism, and introversion (Grijalva, Newman, Tay, Donnellan, Harms, Robins, Yan, 2015; Hendin & Cheek, 1997; Pincus & Roche, 2011; Pincus & Lukowitsky, 2010). Vulnerable narcissists differ from grandiose ones in that that they are more emotionally sensitive, and more insecure or defensive (Miller et al., 2010).

Individuals high in grandiose narcissism (from now on 'narcissists' or 'grandiose narcissists'), have high agency that leads them to have inflated self-views, inflated egoism, to seek more attention, associate with more high-status others, take credit for success but blame others for failure, and respond aggressively to perceived criticism (Campbell & Foster, 2007; Campbell, Rudich, & Sedikides, 2002; Carlson, Vazire, & Oltmanns, 2011; Hepper, Gramzow, & Sedikides, 2010; Horton & Sedikides, 2009; Morf, Horvath, & Torcheti, 2011; Raskin and Terry, 1988). Additionally, narcissists' lack of communion leads them to be more prone to exploit others, express low empathy for others, act less morally towards others and generally be less agreeable (Bushman & Baumeister, 1998; Campbell & Foster, 2002; Foster, Shrira, & Campbell, 2006; Hepper, Hart, & Sedikides, 2014; Leunissen, Sedikides, & Wildschut, 2017; Luhtanen & Crocker, 2005; Martin, Benotsch, Perschbacher Lance, & Green, 2012; Morf et al., 2011; Sedikides, Campbell, Reeder, Elliot, & Gregg, 2002). This combination of high agency and low communion is associated with interpersonal deficiencies in which original likeability of narcissists soon wears off, as with repeated interactions narcissists are perceived as arrogant, overestimating abilities, hostile, braggarts (Paulhus, 1998; see also: Back et al., 2010; Steinmetz, Sezer, & Sedikides, 2017). Paulhus (1998) examined the interpersonal consequences of narcissism. He tested students who met weekly for seven consecutive weeks as part of discussion groups. Initially, participants with higher (compared to lower)

levels of narcissism were evaluated by their peers as more competent, agreeable, and open to experience. After the last meeting (week 7), however, narcissists were evaluated by their peers as less agreeable, more arrogant, and colder than non-narcissists. Relatedly, through their actions, narcissists are more likely to terminate romantic bonds (Campbell & Foster, 2007). Furthermore, Wurst and colleagues (2016) found in a series of studies that agentic components of narcissism led to short-term appeal, whereas antagonistic components of narcissism (exploitativeness) led to more long-term relationship problems. In addition, Czarna, Dufner, and Clifton (2014) examined the perceived popularity of grandiose and vulnerable narcissists. They asked students who had been acquainted for at least six months and interacted on a daily basis to fill out self-report and peer-assessment measures. Students were asked to nominate persons they liked and disliked. Grandiose narcissists were actively disliked, whereas vulnerable narcissists were less liked.

Furthermore, there has been some evidence that narcissism levels are rising in both individualistic and collectivistic cultures (Cai, Kwan, & Sedikides, 2012; Twenge et al., 2008; for an alternative view, see: Wetzel et al., 2017). If so, the negative consequences that are linked to this personality trait will also keep rising over time too at societal cost.

1.2.2 Models of Narcissism

I next discuss several theoretical models of narcissism: the dynamic self-regulatory processing model (Morf & Rhodewalt, 2001), the extended agency model (Campbell & Foster, 2007), and more recently, the three-dimensional structure of narcissism comprising agentic, antagonistic, and neurotic aspects (Back & Morf , 2017; Miller et al., 2016; Weiss, Campbell, Lynam, & Miller, 2019), and the Narcissism Spectrum Model (Krizan & Herlache, 2018). The dynamic self-regulatory processing model mainly focuses on traits that define and regulate narcissists' identity. The model contains four interacting components: self-knowledge (i.e., inflated self-concept), intra-personal self-regulatory processes (i.e., biased interpretations of social feedback and performance outcomes),

interpersonal strategies (i.e., behaviours to construct and regulate desired self), and social relationships (i.e., having relationships to self-enhance). The extended agency model focuses on both interpersonal and intrapersonal aspects of narcissistic self-regulation. These are interpersonal skills (e.g., confidence, charm, charisma), intrapsychic strategies (e.g., fantasies of power, self-perceived attractiveness), and interpersonal strategies (e.g., better-than-average, self-promotion). In this model, each of these components are mutually reinforcing.

More recently there has been a theoretical conceptualisation that narcissism comprises of three different components: agentic extraversion, antagonism, and neuroticism (Back & Morf, 2017; Krizan & Herlache, 2018; Miller et al., 2016; Weiss, et al., 2019). Agentic extraversion comprises of narcissistic features such as extraversion and dominance; antagonistic aspects (i.e., low agreeableness) comprises of features such as exploitativeness and entitlement; whereas neurotic aspects comprises of features such as a need for admiration. These three components are also related with the classification of narcissism into grandiose and vulnerable components. Grandiose narcissism overlaps with agentic extraversion and antagonism, whereas vulnerable narcissism overlaps with neuroticism and antagonism. Figure 1.1 displays how the different conceptualisations of narcissism overlap with one another.

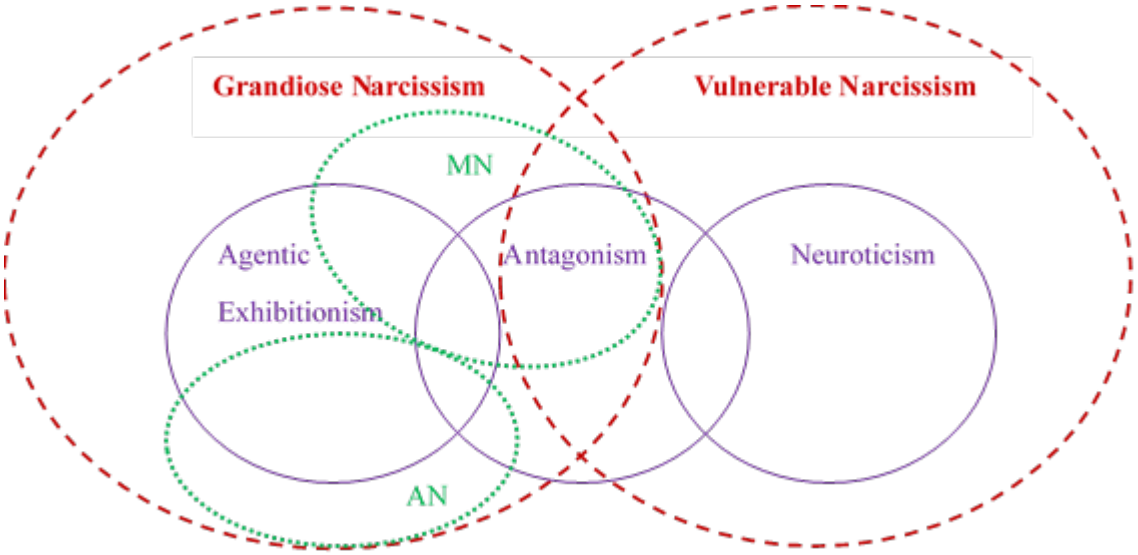


Figure 1.1 Relation between two-factor (i.e., grandiose & vulnerable narcissism; red, dashed circles) and three-factor (i.e., agentic exhibitionism, antagonism, and neuroticism; purple, solid circles) conceptualisations and aspects of narcissism, as well as the further distinction of grandiose narcissism into Adaptive Narcissism [AN] and Maladaptive [MN] (green, dotted circles). Overlapping circles display conceptually and empirically derived associations between aspects.

1.2.3 Measures of Narcissism

The two broad dimensions of narcissism (grandiose and vulnerable) are measured as separate constructs. Debate for relevant measures has been ongoing (Coleman, Pincus, Smyth, 2019; Foster et al., 2018; Freis, 2018; Miller et al., 2014). However, the most used measure for grandiose narcissism is the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988), and for vulnerable narcissism is the HypersSensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997).

Originally, the NPI was conceptualised as having a seven lower-order factor-structure (i.e., authority, self-sufficiency, superiority, exhibitionism, exploitativeness, vanity, and entitlement; Raskin & Hall, 1979). However, this factor structure has since been discredited in favour of a higher-order structure (Ackerman, Witt, Donnellan, Trzesniewski, Robins, & Kashy, 2011; Barry, Frick, Adler, & Grafeman, 2007; Barry & Malkin, 2010; Corry, Merritt, Mrug, & Pamp, 2008; Wetzel, Leckelt, Gerlach, & Back, 2016).

Over a decade ago, Barry and colleagues (Barry et al., 2007; Barry & Malkin, 2010) drew a distinction between two types of narcissism: adaptive (i.e., authority, self-sufficiency) and maladaptive (i.e., exploitativeness, entitlement, exhibitionism). The terms adaptive and maladaptive narcissism reflect how observers might view the narcissist, and both types serve intrapersonal functions. Adaptive and maladaptive narcissism are separate constructs but are intercorrelated. Therefore, high narcissists are likely to display elements of both types. In general, maladaptive narcissism is mostly associated with undesirable, socially inappropriate, or destructive behaviour (e.g., aggression, substance abuse, or unsafe sex; Barry et al., 2007; Back, Schmukle, & Egloff, 2010; Hepper, Hart, Meek, Cisek, & Sedikides, 2014). Adaptive narcissism is characterised by more desirable qualities (e.g., assertiveness, independence, self-confidence, autonomy; Barry et al., 2007). Maladaptive narcissism is seen as more detrimental to society than adaptive narcissism. Most research, however, has focused on overall narcissism (measured with the total score on the NPI) rather than differences between adaptive and maladaptive narcissism. When research has addressed differences of adaptive or maladaptive narcissism, it has focused mostly on maladaptive narcissism and its repercussion for the individual and society (Barry et al., 2007; Golmaryami & Barry, 2010; Hepper et al., 2014), and not on adaptive narcissism.

Corry and colleagues (2008) proposed another higher-order classification of the NPI. They conducted a three-phase study on the factor structure of the NPI, using Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and construct validity of the selected scales. Their analyses resulted in a two higher-order factor structure: Leadership/Authority and Exhibitionism/Entitlement. During the research phase on construct-validity, they compared their two higher-order factor-structure with the Big Five Personality traits. They found that Leadership/Authority correlated positively with Extraversion and Conscientiousness, and negatively with Neuroticism and Agreeableness,

whereas Exhibitionism/Entitlement correlated positively with extraversion, but negatively with Agreeableness.

Whereas Corry and colleagues (2008) prioritised high internal consistency in the development of their scales, Ackerman and colleagues (2011) did not. They firstly conducted an EFA on the NPI-items, and used CFA from two different study-samples to validate their found factor-structure. They conducted four studies where they found support for a three factor model, consisting of Leadership/Authority, Entitlement/Exploitativeness, and Grandiose Exhibitionism. These researchers expressed concerns regarding their three-factor structure. In particular, given that their Entitlement/Exploitativeness scale only had four items, they suggested to combine Entitlement/Exploitativeness and Grandiose Exhibitionism into an overarching maladaptive narcissism-construct, and to keep Leadership/Authority as a measure of adaptive narcissism (as recommended by Barry and colleagues, 2007, 2010).

The need to look for sub-classifications of narcissism has recently been re-emphasised by Wetzel and colleagues (Wetzel, Leckelt, Gerlach, & Back, 2016), Miller and colleagues (Miller et al., 2016), Krizan and Herlache (2018). Whereas the other classifications were based on the NPI, these authors used different scales to measure narcissism. Wetzel and colleagues (2016) used the Narcissistic and Rivalry Questionnaire (NARQ; Back et al., 2013) as the starting point of their sub classification of narcissism. They distinguished among four subgroups: low narcissists, moderate narcissists with agentic aspects, moderate narcissists with agentic and antagonistic aspects, and high narcissists. They found that these four subgroups differed in expressions of more agentic and antagonistic traits, and linked this back to adaptive and maladaptive traits. They also stated that an overall narcissism score could obscure insights into the complex trait of narcissism.

Miller and colleagues (2016) examined the different components within the Five-Factor Narcissism Inventory (FFNI; Glover, Miller, Lynam, Crego, & Widiger, 2012). Across two studies, they found that the FFNI supported the extraction of three factors: antagonism (e.g., extraversion, lack of empathy, entitlement), neuroticism (e.g., indifference, need for admiration), and agentic extraversion (e.g., authoritiveness, exhibitionism). Their research further established that antagonism factor was correlated with both grandiose narcissism (e.g., both adaptive and maladaptive components; NPI Leadership/Authority, NPI Grandiose Exhibitionism; NPI Entitlement; Ackerman et al., 2011) and vulnerable narcissism levels (e.g., HSNS), neuroticism was mainly correlated with other measures of vulnerable narcissism (e.g., HSNS), and agentic extraversion was mainly correlated with other measures of grandiose narcissism (e.g., mainly adaptive components: NPI Leadership/Authority, but also NPI Grandiose Exhibitionism; Ackerman et al., 2011).

Krizan and Herlache (2018) introduced the Narcissism Spectrum Model (NSM) to deal with differences based on grandiose and vulnerable traits within narcissism. In their model they focused on how narcissists present themselves, i.e., whether narcissists are approach-oriented (i.e., grandiose/bold), or avoidance-oriented (i.e., vulnerable/reactive). Furthermore, they identified that self-importance and entitlement could influence both of these orientations, and therefore is the missing link between grandiose and vulnerable aspects of narcissism. Returning to the focus of this thesis, how then would individuals with such a combination of personality characteristics cope with stress?

1.2.4 Narcissism and Coping with Stress

Even though it is established that narcissists are prone to stress, and are more susceptible to experiencing stressful life events (Orth & Luciano, 2015), there is almost no research on how narcissists cope with stress.

The literature indicates that individuals high in narcissism are more likely to gamble, have unsafe sex, and abuse alcohol (Luhtanen & Crocker, 2005; Foster, Shrira, & Campbell, 2006; Lakey, Rose, Campbell, & Goodie, 2008; Martin, Benotsch, Perschbacher Lance, & Green, 2012). However, none of the relevant studies assessed stress. Are these behaviours exacerbated when exposed to stressors? What coping strategies and styles do narcissists use? And do they rely on social support? Given that narcissism is an anti-social personality trait comprising a focus on agency (e.g., power, uniqueness, self-aggrandisement) and a lack of communion (e.g., disagreeableness, entitlement, exploitativeness; Sedikides & Campbell, 2017), narcissists might lack available support from others due to long-term interpersonal alienation (Paulhus, 1998). Therefore, narcissists could use more maladaptive coping styles (such as gambling), and less adaptive coping styles (such as social support). However, social support may be so universally beneficial, that narcissists rely on it, but solicit different types of it.

Hepper, Hart, and Cisek (2011) are the only researchers to date to have examined narcissists' coping styles in times of stress. They focused on narcissists' use of different types of social support and the underlying mechanisms for their use. They hypothesised that low support-seeking would be mediated by narcissists high agency (i.e., support-seeking is weak) and low communion (i.e., lower perceived availability of social support). Further, they hypothesised that narcissists would not benefit from the positive contribution of social support to well-being and life satisfaction, when controlling for self-esteem. Participants completed measures of grandiose narcissism, self-esteem, social desirability, satisfaction with life, and social support-seeking (in typical or stressful times). Hepper and colleagues showed that narcissists seek less social support, in part because they believe that seeking support is a weakness. Additionally, narcissists report that they perceive less support available than non-narcissists. When looking at the breakdown of different subtypes of social support, the researchers found that narcissists (in line with their high

agency and self-sufficiency) believe that seeking support is a sign of a weakness, and therefore are unlikely to use others to gain advice (i.e., informational support), but instead use others to flatter themselves and boost their ego (i.e., esteem support). Yet, this research did not account for the type of stressful event to which participants were exposed, and did not prime a stressful situation before asking about perceived availability of support as well as support-seeking in times of stress. Also, the formulation of the stem of the items in the general social support-seeking questionnaire (e.g., 'in times of worry', 'in times of stress', or 'when faced with problems'), and the perceived availability of social support scale (e.g., 'if something went wrong', or 'when things are hard'), was general as it did not distinguish between types of stress and did not ask participants to keep a specific stressful event in mind. A final limitation of this research is that it only focused on overall narcissism as opposed to examining the relative contribution of adaptive and maladaptive narcissism.

1.3 Present Research

Even though it has been established that grandiose narcissists are prone to stress (Edelstein et al., 2010), there is a dearth of research on how sub-types of narcissists cope with stress, and whether they seek social support (an adaptive coping style) in times of stress. The recent research by Orth and Luciano (2015) showing that narcissism predicted occurrence of stressful life events further highlights the importance and necessity of such research. Understanding subtle differences in the use of coping styles and social support of narcissists in times of stress will help to illuminate the dynamics of narcissists' social relationships, and may reveal how narcissists remain psychologically healthy (Sedikides et al., 2004; Zuckerman & O'Laughlin, 2009), despite their low communality. This is of increasing importance due to the possible rise of narcissism levels globally (Cai et al., 2012; Twenge et al., 2008).

1.3.1 Overview of the Studies

In this PhD thesis, I will combine literatures from social and personality psychology, and stress and coping. I am interested in how narcissists cope with stressful situations, and aim to (1) examine the extent to which narcissists seek and perceive social support, and for what reasons; (2) examine a range of other coping strategies used by narcissists (both healthy and unhealthy), and reasons for use; (3) examine whether type of stressor experienced (i.e., agentic, communal, or external) changes their use of coping strategies; (4) explore whether narcissists' coping strategies aid or undermine their wellbeing; and (5) examine whether it is possible to change these patterns of behaviour using a self-affirmation-manipulation. In pursuing all these aims, I am interested in whether there are differences based on subtype of narcissism (i.e., grandiose, adaptive, maladaptive, and vulnerable). I will report three studies, each with slightly different objectives and research designs. For clarity, whenever I denote a subtype of narcissism, I am referring to high scoring individuals on that corresponding subtype. Moreover, whenever I mention adaptive narcissists, I am referring to individuals scoring high on adaptive narcissism (whilst controlling for their level of maladaptive narcissism), and vice versa for maladaptive narcissism.

1.3.1.1 Study 1 (Chapter 2)

The first study, an experiment, focuses on whether narcissists use (different types of) social support in times of stress, and for what reason they use (or do not use) social support. Furthermore, the study examines the use of other coping styles that narcissists may use in times of stress, and explores whether narcissists' behaviour depends on type of stressor experienced.

1.3.1.2 Study 2 (Chapter 3)

The second study, a diary study, utilises a repeated-measures design with three parts (and six questionnaires) over a time-span of 15 days. Participants completed a

questionnaire every three days. I try to identify behavioural mechanisms that could explain why narcissists use other types of coping with stressful situations. In Part I, participants answered personality, behavioural, and well-being questionnaires. In Part II, participants receive four invitations (i.e., every three days) to complete a short questionnaire about a stressful event that happened to them in the last few days and how they coped with it. In Part III, participants responded to the same well-being questionnaires as in Part I.

1.3.1.3 Study 3 (Chapter 4)

In the final study, I examine whether it is possible to change narcissists' behaviour in response to stressors. Participants were randomly allocated into either a manipulation (self-affirmation) or control condition, and subsequently were asked how they would reply to a certain specific stressful situation.

Chapter 2 Study 1 – Narcissists Mixed Use of Social Support in Times of Stress

2.1 Narcissism and Stress

Grandiose narcissism is a multifaceted anti-social personality trait, characterised by a focus on agency (e.g., power, uniqueness, self-aggrandisement) and a lack of communion (e.g., disagreeableness, entitlement, exploitativeness; Sedikides & Campbell, 2017). Recently, it has been conceptualised into two distinct components of: adaptive (i.e., authority, self-sufficiency) and maladaptive narcissism (i.e., exploitativeness, entitlement, exhibitionism; Barry & Malkin, 2003; Barry & Malkin, 2010; Barry et al., 2007). These terms reflect how observers might view narcissists, and both may serve intrapersonal functions for narcissists. The adaptive and maladaptive components of narcissism are correlated but distinct, which indicates that high narcissists are likely to have elements of both maladaptive and adaptive narcissism. In general, maladaptive narcissism is mostly associated with undesirable, socially inappropriate, or harmful behaviour (e.g., aggression, substance abuse, unsafe sex; Barry et al., 2007; Back et al., 2010; Hepper et al., 2014).

Despite reporting high psychological wellbeing (i.e., high self-esteem and happiness, low depression and anxiety; Sedikides, et al., 2004; Zuckerman & O'Laughlin, 2009), grandiose narcissists are prone to stress, with higher levels of narcissism being linked to increased susceptibility to stressful life events (Orth & Luciano, 2015). In particular, narcissism is associated with elevated cortisol levels, which is an indicator of a chronically-activated stress response system (Cheng et al., 2013; Edelstein et al., 2010; Reinhard et al., 2012).

Causes of stress can be variable, but can be classified into agentic and communal domains. Narcissists may experience more stress when those causes are agentic (i.e., due to personal goal failure) rather than communal (i.e., due to interpersonal rejection), or

external (i.e., due to something outside one's control; O'Brien & DeLongis, 1996). If stress is not handled effectively, experiencing it may eventually culminate in an increase in physical health problems, mental health problems, and interpersonal problems. Therefore, it is crucial to engage in coping mechanisms that can help buffer against the negative effects of stress (Chapter 1; Cohen et al., 2001; Herbert & Cohen, 1993). How do narcissists cope with elevated stress, and does the cause of the stressor influence their coping-style?

2.2 Narcissism and Coping with Stress

The most commonly used adaptive coping style for dealing with stress is the use of social support. Research on social support has shown that *perceived* availability of social support can reduce pain (Brown et al., 2003; Coan et al., 2006) and psychological stress (Haber et al., 2007). There are four subtypes of social support based on its function: instrumental support (e.g., practical help), esteem support (e.g., flattery, reassurance), emotional support (e.g., comfort), and informational support (e.g., advice; House, 1981; Schwarzer & Schultz, 2000).

Do narcissists seek social support in times of stress? Given their low communion, grandiose narcissists might lack available support from others due to long-term interpersonal alienation (Paulhus, 1998), whereas vulnerable narcissists may be disliked due to their defensiveness to obscure their insecurity (Czarna, Dufner, & Clifton, 2014). However, social support may be so universally beneficial that narcissists rely on it, but solicit different types of it. Only one study has examined the link between narcissism and use of social support. Hepper and colleagues (2011) addressed narcissists' use of social support, and their reasons for doing so. Higher narcissism was linked to lower use of social support. Prior literature identified four mechanisms that influence the use of social support: the belief that seeking support is a weakness; the belief that seeking support is an opportunity to manipulate and exploit; the belief that seeking support is natural and

healthy; and availability of social support. In the Hepper et al. work, narcissists perceived social support-seeking as a weakness (in line with their agency), and perceived having lower availability of social support (in line with their low communion). However, there was no evidence that narcissists used support-seeking as an opportunity to exploit others, or that they perceived it as being unnatural and unhealthy. The current research aims both to replicate and extend this initial exploration into narcissism and social support.

2.2.1 The Current Study

The current study examined potential mechanisms that might explain the link between narcissism and social support, and tested whether different types of stressors influenced the use of, or reasons for using social support. Furthermore, this study focused on other coping strategies used by narcissists in times of stress, and attempted to classify them into overarching coping styles.

I hypothesised that higher narcissism would be associated with reduced use of social support in times of stress. Regarding the underlying mechanisms, I hypothesised that use of social support in times of stress would be mediated by narcissists' high agency (i.e., their belief that social support is a weakness), low communion (i.e., their perceptions that social support is unavailable), exploitativeness (i.e., their willingness to take advantage of others for own benefit), and failure to believe that seeking social support is natural and healthy. More specifically, I predicted a positive relation between grandiose narcissism and perceptions of social support being unavailable, perceptions of support as a weakness, and perceptions of support as being less healthy. In turn, I predicted these mechanisms would be associated with lower use of social support. I also predicted that social support would be seen as an opportunity by high scoring narcissists to exploit and manipulate others. In turn, increased exploitativeness would be associated with an increased use of social support. In terms of the subtypes of social support, I hypothesised that narcissists would prefer, if necessary, to seek instrumental support (e.g., practical help) because it does not reveal an

emotional weakness, and esteem support (e.g., flattery, reassurance) because it helps them maintain an inflated self-view. Conversely, high narcissists would be less likely to seek emotional support (e.g., comfort) or informational support (e.g., advice), as this might be perceived by others as a form of weakness.

This study builds upon the Hepper et al. (2011) study in three ways: it focuses on the multidimensionality of narcissists; on how narcissists react to different types of stressors; and examines other coping styles narcissists might use in time of stress. I address the *multidimensionality of narcissism* by including differences between distinct components of narcissism (i.e., grandiose [adaptive and maladaptive] and vulnerable). In line with the classification of grandiose narcissism into adaptive and maladaptive components by Barry and colleagues (Barry et al., 2007; Barry & Malkin, 2010), I hypothesised that participants scoring higher on maladaptive narcissism (i.e., exploitativeness, entitlement, exhibitionism) would perceive social support as less available and healthy, and more as a weakness and opportunity to exploit. Contrastingly, I hypothesised that participants scoring higher on adaptive narcissism (i.e., authority, self-sufficiency) would perceive social support as available and a natural resource, and less as a weakness or an opportunity to manipulate or exploit others.

Vulnerable narcissists (i.e., low self-esteem, avoidance of interpersonal relationships; Pincus & Roche, 2011; Pincus & Lukowitsky, 2010) differ from (grandiose) narcissists in the sense that vulnerable narcissists are more emotionally sensitive, and are more defensive and insecure (Miller et al., 2010), as well as more neurotic and avoidance-oriented (e.g., Back & Morf, 2017; Krizan & Herlache, 2018; Miller et al., 2016). No research to date has focused on vulnerable narcissists' use of social support, and their motivations for doing so. However, peer networks of vulnerable narcissists manifest lower liking (Czarna et al., 2014), and so they might alienate others as well. Along these lines, and the previous conceptualisations of vulnerable narcissism, I hypothesised that

vulnerable narcissists would lack availability of social networks to ask for support, and due to their insecurity might see asking for support as a weakness.

In a further extension of Hepper et al.'s (2011) work, the current research also focused on *different types of stressors* that people experience. Past research typically asked about a stressful event in general and later coded the responses into different types of stressors (O'Brien & DeLongis, 1996). Here, participants wrote about a specific stressful situation they experienced in the month prior to testing having been assigned to one of three conditions: the stressful event was mainly agentic (i.e., due to failure of a personal goal or accomplishment), communal (i.e., due to rejection in interpersonal interaction), or external (i.e., outside of their control).

According to the Extended Agency Model, narcissists behave in ways that allow them to fulfil their agentic desires (Campbell & Foster, 2007). Thus, narcissists may find stressors that are agentic to be more threatening than other types of stressors. In contrast, due to their lack of caring, they may be less affected by experiencing communal stressors. Thus the type of stressor may impact on how stressed they feel and type of coping strategy used. I hypothesised that, for grandiose narcissists, agentic stressors would be more threatening (compared to communal and external stressors) and so would have a stronger effect on the associations with lower support-seeking.

Since I do not hypothesise that narcissists would use (all types of) social support, this research also *explored other coping styles* that narcissists may use in times of stress. There is no research to date on what coping styles narcissists use when experiencing stressors, therefore I explored over 100 coping items, and categorised these into higher order coping strategies. Based on the theoretical differences between different subtypes of narcissism as explained by the Narcissism Spectrum Model (Krizan & Herlache, 2018), I expected grandiose narcissists to use more approach-oriented coping styles (i.e., both positive [i.e., problem-solving] and negative [i.e., aggression] oriented), whereas

vulnerable narcissists were predicted to use more avoidance-oriented coping styles (i.e., removing themselves from the situation). This is in line with current cross-sectional evidence that grandiose and vulnerable narcissists differ in their stress-reactivity (Coleman, et al., 2019), and grandiosity has been positively correlated with task-oriented coping, and negatively with avoidance coping, whereas vulnerability has been linked to disengagement.

Furthermore, based on previous literature describing differences between subtypes of grandiose narcissism (Barry et al., 2007; Barry & Malkin, 2010), I expected maladaptive narcissists to use more harmful coping styles (e.g., aggression, substance abuse), and adaptive narcissists to use more helpful coping styles (e.g., use of support; and problem solving). I conducted a factor analysis on the coping items to examine the overarching coping styles used when dealing with stressors. I tested whether the use of these coping styles differed depending on type of stressor (i.e., agentic, communal, or external), and subtype of narcissism (i.e., grandiose, adaptive, maladaptive, and vulnerable). Agentic sources of stress (compared to communal and external sources of stress) were hypothesised to have a higher negative impact on the use of helpful coping styles.

This study provides a crucial first exploratory step in establishing differences in narcissists' coping responses to different types of stressful situations. It is the first to examine differences between four subtypes of narcissism (i.e., grandiose, adaptive, maladaptive, and vulnerable) in this research domain. Therefore, results will give more insight into narcissistic strategies and how narcissists react to different stressors.

To summarise, the primary aims of this study were to: (1) identify whether narcissists use social support in times of stress; (2) examine the motivations that led narcissists (four different [sub]types of narcissists) to use or not use social support and its subsequent subtypes; and (3) examine whether relations between narcissists' motivations for use of social support are dependent on type of stressor experienced [agentic, communal, external]. The secondary aims of this study were to: (4) identify what other

coping strategies narcissists use in times of stress; and (5) explore whether use of these other coping strategies are qualified by type of stressor experienced.

2.3 Method

2.3.1 Participants

Originally, I recruited 455 participants via Amazon Mechanical Turk (MTurk). Of those, I excluded 61 on the basis of the following a priori criteria: failing to complete all instructional manipulation checks correctly (n = 52), not being from the U.S. (n = 1), failing to complete at least 85% of the 40-item NPI (n = 7), or not having a specific event in mind when answering questions relating to how they dealt with a stressful event (n = 1). All participants were paid $1.50 on completion of the survey.

The final sample (N = 394) consisted of 213 women and 181 men, with an age range of 18-69 (M_{age} = 34.52, SD_{age} = 11.06). All participants were residents of the U.S., with 98.48% of the sample having English as a first language.

The majority of participants classified their ethnicity as White (75.38%). Other ethnic backgrounds were Black (7.87%), Asian (2.03%), mixed (9.14%), or other (5.58%). Participants' highest level of education was: high school graduate – high school diploma or equivalent (13.71%), one or more years of college, no degree (23.10%), Associate degree (14.97%), Bachelor's degree (39.59%), Master's degree (5.84%), Professional degree (2.28%), or a Doctorate degree (0.51%). Most participants were employed full-time (59.14%). The other participants were employed part-time (16.24%), student (8.63%), home-maker (4.57%), unemployed (9.64%), or otherwise employed (1.78%).

2.3.2 Materials and Procedure

The online study was advertised on Amazon MTurk, as a "Personality and Coping Survey", which would take 30-45 minutes to complete. Participants provided consent before starting the survey. They first completed general questions about demographics, followed by narcissism questionnaires. Next, participants were randomised into one of three

conditions (i.e., agentic, communal, or external), where they had to recall a stressful event. After recalling the stressful event, all participants received behavioural coping and social support questionnaires. The study ended with a mood repair and debriefing statement, after which participants were monetarily compensated.

2.3.2.1 Narcissism Questionnaires

2.3.2.1.1 Grandiose, Adaptive, and Maladaptive Narcissism

I assessed grandiose narcissism with the 40-item NPI (Raskin & Terry, 1988). For each item participants chose between a pair of statements, one indicating high narcissism (e.g., "I am a born leader"), the other indicating low narcissism (e.g., "Leadership is a quality that takes a long time to develop"). The number of narcissistic items constituted the narcissism score. Scores ranged from 0 to 39 (M = 12.03, SD = 8.56, α = .92).

Following Barry and colleagues (Barry et al., 2007; Barry & Malkin, 2010), I computed scores for adaptive narcissism (consisting of six self-sufficiency and eight authority items) and maladaptive narcissism (consisting of seven exhibitionism, five exploitativeness, and six entitlement items). Adaptive narcissism scores ranged from 0 to 14 (M = 5.65, SD = 3.88, α = .85). Maladaptive narcissism scores ranged from 0 to 17 (M = 4.15, SD = 3.69, α = .83). Consistent with past research (Barry et al., 2007; Hepper et al., 2014), adaptive and maladaptive narcissism correlated positively, r (394) = .66, p < .001.

2.3.2.1.2 Vulnerable Narcissism

I used the 10-item HSNS (Hendin & Cheek, 1997) to assess vulnerable narcissism (e.g., "I often interpret the remarks of others in a personal way"; 1 = *not at all*, 8 = *very much so*). Scores ranged from 10 to 80 (M = 40.98, SD = 13.74, α = .85). Consistent with past research (Hendin & Cheek, 1997), grandiose and vulnerable narcissism were uncorrelated, r (394) = .02, p = .630.

2.3.2.2 Recalling a Stressful Event

After completing the personality measures, participants recalled a stressful situation, defined as: "*By 'stressful' I mean a situation that was difficult or troubling for*

you, either because you felt distressed about what happened, or because you had to use considerable effort to deal with the situation." Specifically, participants were randomly allocated to one of three recall conditions: agentic stressor (*n* = 134, 34.01%), communal stressor (*n* = 118, 29.95%), or an external stressor (*n* = 142, 36.04%). In the agentic stress-condition, participants recalled a stressful event resulting from "*having personal goals or accomplishments* (*e.g., failure to meet a deadline, study/work demands, applying for promotion)*". In the communal stress-condition, participants recalled a stressful event resulting from "*an interaction with someone close and important to you* (*e.g., a family member, close friend, or romantic partner; e.g., infidelity/relationship problems, travel/vacation, addition to the family)"*. Finally, in the external stress-condition, participants recalled "*a stressful event resulting from something outside of your control* (*e.g., waiting for medical test results, experiencing financial difficulties, moving house)"*.

In all conditions, participants recalled a stressful event that happened in the past month, which they felt comfortable revealing to the researchers. Participants were told it was important to recall and share as much detail as possible about the stressful event, but within their comfort-zone of disclosure, with all their responses being confidential.

2.3.2.3 Manipulation Checks

After providing a written account of their stressful event, participants answered questions about it on an 8-point scale (1 = *not at all*, 8 = *very much so*). Three of the questions checked whether participants had complied with instructions about the stressful event. The questions probed about the extent to which the described event was caused by personal goals or accomplishments (agentic), an interaction between themselves and a person close and important to them (communal), or something outside their control (external). Participants also rated how stressful, controllable, and upsetting they found the event, and how confident they were coping with the event. Next, they completed coping questionnaires.

2.3.2.4 Coping Questionnaires

To reduce order effects, I presented all coping-items in a random order. Unless otherwise specified, items were scored on an 8-point rating scale, ranging from 1 (*not at all*) to 8 (*very much so*). To test if participants were paying attention and reading questions carefully, six instructional manipulation checks were interspersed throughout the coping questionnaires (Oppenheimer, Meyvis, & Davidenko, 2009). An example of such a check is "Please answer this question by selecting 5".

2.3.2.4.1 Perceived Availability of Social Support

The Perceived Availability of Social Support-Scale (PASS; as used by Hepper et al., 2011, which was adapted from existing scales: Cohen & Hoberman, 1983; Cutrona & Russell, 1987; Schwarzer & Schulz, 2000; Zimet, Dahlem, Zimet & Farley, 1988), consists of 12 items about participants' feelings towards the availability of social support during the stressful event they just described (α = .94). Each type of social support was assessed with three questions: *emotional* support (e.g., "At the time, I felt there was someone there for me when I needed comforting", α = .81), *informational* support (e.g., "At the time, I felt that the people around me were willing to help me make decisions", α = .85), *instrumental* support (e.g., "At the time, I felt that I could easily get help from my close others", α = .79), and *esteem* support (e.g., "At the time, I felt I could count on people around me to help me feel better about myself", α = .65). The four subtypes of PASS were highly correlated (all *r*s > .74, *p*s < .001). Therefore, to avoid multi-collinearity issues, I only used overall PASS in my analyses.

2.3.2.4.2 Perceptions of Social Support

A 17-item questionnaire measured participants' perceptions towards social support (Hepper et al., 2011). Three perceptions were measured: Belief that social support-seeking is weak (9 items, α =.87, e.g., "Only weak people ask others for emotional support"), belief that social support can be used to manipulate and exploit others (4 items, α = .67; e.g., "I

should take as much as possible from others to make my life easier"), and the belief that social support is natural and healthy (4 items, α = .88; e.g., "It is natural to ask other people for support in times of need").

2.3.2.4.3 Social Support-Seeking

The Social Support-Seeking Scale (SSS) used here is adapted from the General Social Support-Seeking Scale developed by Hepper et al. (2011). Participants indicated the extent to which they used each coping strategy during, or right after, the stressful event they just described. The SSS consists of 20 social support items (α = .96), divided into four sub-categories with five items each: *emotional* support (e.g., "I relied on others for comfort"; α = .93), *informational* support (e.g., "I asked others for advice"; α = .93), *instrumental* support (e.g., "I sought practical support from others"; α = .85), and *esteem* support (e.g., "I turned to someone to remind me that I am a worthy person"; α = .88).

2.3.2.4.4 Behavioural Coping

The Behavioural Coping-List (BC, Adapted from Hepper, Hart, & Cisek, unpublished manuscript) is a list of 23 activities and behaviours that people might use as coping strategies in a stressful situation (e.g., "talked face-to-face with someone I am close to", "withdrew from people and just be on my own", "smoked a cigarette/tobacco"). Participants indicated the extent to which they used each coping strategy during, or right after, the stressful event they just described (all 23 items: α = .83).

2.3.2.4.5 Ways of Coping – Revised

The Ways of Coping-Revised (WOC-R; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986) is a 66-item questionnaire containing different coping strategies that people can use in times of stress (e.g., "I expressed anger to the person(s) who caused the problem", "I made a plan of action and followed it"). The WOC-R focuses on coping strategies used in a specific event. In this study, participants indicated the extent to which they used each coping strategy during, or right after, the stressful event they just described.

2.3.2.5 Mood Repair

Finally, to counter any temporary negative feelings participants might have felt during the study, participants completed a mood repair task whereby they listed three things that made them happy during the past month. This was followed by a debrief in which participants were thanked for taking part, received information about the aim of the study, information about the background of the research, contact information of the investigators, and information if they need support for dealing with anxieties and concerns that might have resulted from participating in the study.

2.4 Results [1]

2.4.1 Data Preparation

In preparing the data for analyses, I computed key variables and checked for outliers and whether or not they were normally distributed. I classified an item as an outlier when it had a Z-score of +/- 3.29 (Field, 2013). All items were normally distributed, and only maladaptive narcissism scores contained one outlier. I reduced this outlier following a technique described in Tabachnick and Fidell (2007, p. 77). They advise to reduce the raw score of an outlier to be one meaningful unit above the next outlier in the data-set. In this case, the outlier was already one meaningful unit above the next outlier, therefore the raw score was changed to be identical to the next score in the dataset. For skewness and kurtosis, cut-off scores of -2 and +2 (Field, 2013) were used. As can be seen in Table A2.1 (Appendix A), the cut-off-scores for skewness and kurtosis were all within range.

2.4.2 Manipulation of Stressful Event

To check for significant differences in narcissism scores between participants exposed to the different stressful conditions, I used one-way ANOVAs. No significant differences were found: Overall grandiose narcissism: F (2,391) = 0.14, p = .872, η_p^2

[1] Some Tables and Figures associated with this section are numbered ‘A2.’ or ‘B2.’. These are shown in Appendix A and B, respectively.

= .001; adaptive narcissism: F (2,391) = .21, p = .813, η_p^2 = .001, maladaptive narcissism: F (2,391) = .43, p = .650, η_p^2 = .002, and vulnerable narcissism: F (2,391) = 2.05, p = .130, η_p^2 = .010 (for Means and SD, see Table 2.1).

Table 2.1
Means (SD) for Narcissism Scores in Each Condition and Overall

	Agentic Condition (n=134)	Communal Condition (n=118)	External Condition (n=142)	All (N=394)
Grandiose Narcissism	11.85 (8.35)	12.39 (8.78)	11.95 (8.65)	12.05 (8.57)
Adaptive Narcissism	5.77 (3.74)	5.47 (3.70)	5.70 (4.19)	5.65 (3.88)
Maladaptive Narcissism	3.95 (3.75)	4.36 (3.77)	4.18 (3.57)	4.15 (3.69)
Vulnerable Narcissism	39.51 (14.22)	42.97 (12.82)	40.71 (13.92)	40.98 (13.74)

Kruskal-Wallis tests revealed that there were differences between the three conditions on whether it was caused by an agentic stressor, H(2) = 33.30, a communal stressor, H(2) = 71.15, or an external stressor, H(2) = 27.86, all ps < .001 (for medians and IQR, see Table 2.2). I used Mann-Whitney tests with Bonferroni corrections ($\alpha/c = 0.0167$) to test differences between type of stressors for all of the perceived causes. Participants in the *agentic* condition regarded the event they described as caused by agentic stressors compared to those in the communal, Z = -5.17, p < .001, and the external stressor, Z = -4.73, p < .001, conditions. Participants in the communal and external stressor-conditions did not differ, Z = -0.33, p = .745. Also, participants in the *communal* condition regarded the event they described as caused by communal stressors relative to those in the agentic, Z = -7.55, p < .001, and the external stressor, Z = -7.15, p < .001, conditions. Participants in the agentic and external stressor-conditions did not differ, Z = -0.50, p = .619. Finally, participants in the *external* condition considered the event they described as caused by something outside their control compared to those in the agentic, Z = -4.66, p < .001, and communal stressor, Z = -4.44, p < .001, conditions. Participants in the agentic and communal stressor-conditions did not differ, Z = -0.80, p = .423.

Table 2.2

Means (SD) or Medians (IQR) for Manipulation Checks in Each Condition

	Agentic Condition (n=134)	Communal Condition (n=118)	External Condition (n=142)
To what extent was the event you just described...			
… Caused by having personal goals or accomplishments? [a]	5.00 (1.00-7.00)	2.00 (1.00-4.00)	2.00 (1.00-4.00)
… Caused by an interaction between yourself and a person close and important to you? [a]	2.00 (1.00-5.00)	7.00 (4.00-8.00)	2.00 (1.00-5.00)
… Caused by something outside your control? [a]	6.00 (3.25-8.00)	7.00 (5.00-7.25)	8.00 (6.00-8.00)
How stressful did you find this event? [b]	6.93 (1.32)	6.95 (1.12)	6.99 (1.32)
How upsetting did you find this event? [a]	7.00 (5.50-8.00)	7.00 (6.00-8.00)	7.00 (6.00-8.00)
How confident were you dealing with this event? [b]	6.29 (1.78)	3.93 (2.16)	4.23 (2.22)
How controllable did you find this event? [a]	3.00 (2.00-5.50)	2.00 (1.00-4.00)	2.00 (1.00-4.00)

Note: [a] values depicted are mean (SD), [b] values depicted are Median (IQR)

Participants also answered questions regarding how stressful, upsetting, or controllable they found the event, and how confident they were in coping with it. One-way ANOVAs were computed when data met parametric assumptions, and Kruskal-Wallis Tests were computed when there were issues with the parametric assumptions (i.e., Levene's test showed a significant difference in error variances). A one-way ANOVA did not reveal differences between conditions in how stressful they experienced the event to be, F (2,389) = 0.08, p = .92, η_p^2 = .000.

Additionally, a Kruskal-Wallis test did not show a difference between the three conditions on how upsetting participants found the event, $H(2) = 2.61$, p = .27. However, a one-way ANOVA revealed there were differences in how confident they were with dealing with the event, F (2,389) = 3.31, p = .04, η_p^2 = .017. Post-hoc tests indicated that participants in the agentic condition were more confident in dealing with the event than those in the communal condition. Participants in the agentic and external condition, and the communal and external condition did not differ (see Table 2.2).

Finally, a Kruskal-Wallis revealed a significant difference between the three conditions in regards to how controllable participants found the event, $H(2) = 17.00$, p

< .001. To examine these differences, Mann-Whitney tests were employed using a Bonferroni correction (α/c = 0.0167). Participants in the agentic condition found the event they described more controllable than those in the communal, Z = -2.60, p = .009, and external stressor, Z = -3.99, p < .001, conditions. However, participants in the communal and external stressor-conditions did not differ on perceived event controllability, W_s = 17454, Z = -1.50, p = .14.

In summary, my stress manipulation was successful and showed no differences in levels of stress and upsetting of the event between conditions. However, participants describing an agentic stressor perceived the stressor as more controllable than any other stressor, and they were more confident in coping with the stressor compared to participants describing a communal stressor.

2.4.3 Correlations

Grandiose narcissism and adaptive narcissism were significantly positively correlated with total social support (measured with the SSS), and with three of the subtypes of social support (emotional, informational, and instrumental support). Maladaptive narcissism was significantly and positively correlated with total social support, and instrumental and esteem support, whereas HSNS was uncorrelated with all types of social support.

Furthermore, as hypothesised, grandiose narcissism was positively correlated with the perception that seeking social support is an opportunity to exploit and manipulate others. However, the correlations revealed some relationship patterns that were inconsistent with expectations. Against expectation, no significant zero-order correlations emerged between grandiose narcissism and the perceived availability of social support, the perception that seeking social support is a weakness, and the perception that social support is natural and healthy. As hypothesised, adaptive components of narcissism were positively correlated with the perceived availability of social support. However, I also found that

adaptive components of narcissism were positively correlated with the perception that asking for support is an opportunity to exploit others. As hypothesised, maladaptive components of narcissism were positively correlated with the perceptions that asking for support is a weakness and an opportunity to exploit others. Finally, as hypothesised, vulnerable narcissism was positively correlated with the perceptions that asking for support is a weakness and an opportunity to exploit, and negatively with the perceived availability of social support. Furthermore, vulnerable narcissism was also negatively associated with the perception that asking for support is natural and healthy.

However, zero-order correlations cannot explain causality, and therefore they are not a necessity for inclusion into a mediation model (Hayes, 2018). Moreover, the sub-dimensions of narcissism (i.e., adaptive and maladaptive narcissism) might reveal unique associations when controlling for the effect of each other. Hence, it is important to explore shared and unique variances of the proposed mediators. Therefore, based on theory and previous research (Hepper et al., 2011), I decided to include these mediators into my subsequent models.

2.4.4 Do Narcissists Use Social Support and What Are The Mechanisms Through Which Narcissism Influences Use Of Social Support?

To examine the direct and indirect associations between narcissism and social support seeking, I ran 20 simple regression models with each type of narcissism (i.e., four types: grandiose, adaptive, maladaptive, and vulnerable narcissism) as predictor, and social support seeking as outcome variables (i.e., five types: overall, emotional, informational, instrumental, and esteem). The models with grandiose and vulnerable narcissism as predictors are simple regressions, whereas the models with adaptive and maladaptive narcissism as predictors control for each other's effect. Thus, these last two regressions result in identical variance explained (R^2) and *F*-values for the overall model (see Table 2.3).

All models explained up to 6.4% of the variance in support seeking. However, they were not all significant (see Table 2.3). Higher grandiose narcissism was associated with a significant increase in overall social support, emotional, and instrumental support, but not a significant increase in informational support. When exploring the breakdown between adaptive and maladaptive narcissism, I found that the models for overall and instrumental support were significant; however, neither dimension of narcissism was a significant predictor on its own. This implies their shared variance is associated with higher support seeking, not their unique variance. Furthermore, the models for informational and esteem support were not significant, but in these models higher adaptive narcissism was linked to an increase in informational support, whereas maladaptive narcissism was linked to an increase in esteem support. Vulnerable narcissism did not significantly predict use of social support in any of the models.

Table 2.3
Simple Regression Associations Between Each Type of Narcissism as Predictor and Social Support Seeking as Outcome Variable

	R^2	F [a]	*p*	B	β	t	*p*	95% CI	
								LL	UL
Social Support									
Grandiose Narcissism	**.015**	**12.40**	**< .001**	**1.50**	**.18**	**3.52**	**< .001**	**.66**	**2.34**
Adaptive Narcissism	**.023**	**4.64**	**.010**	.81	.12	1.85	.07	-.05	1.68
Maladaptive Narcissism	**.023**	**4.64**	**.010**	.36	.04	.60	.55	-.82	1.53
Vulnerable Narcissism	.000	.03	.869	.01	.01	.17	.87	-.12	.14
Emotional Support									
Grandiose Narcissism	**.015**	**5.78**	**.017**	**1.25**	**.12**	**2.40**	**.02**	**.23**	**2.27**
Adaptive Narcissism	.014	2.82	.061	1.03	.13	1.94	.05	-.01	2.08
Maladaptive Narcissism	.014	2.82	.061	-.18	-.02	-.25	.80	-1.60	1.24
Vulnerable Narcissism	.001	.28	.600	-.04	-.03	-.53	.60	-.20	.12
Informational Support									
Grandiose Narcissism	.006	2.56	.110	.83	.08	1.60	.11	-.19	1.84
Adaptive Narcissism	.011	2.22	.110	**1.10**	**.14**	**2.07**	**.04**	**.05**	**2.14**
Maladaptive Narcissism	.011	2.22	.110	-.76	-.07	-1.06	.29	-2.18	.65
Vulnerable Narcissism	.000	.03	.875	-.01	-.01	-.16	.88	-.17	.15
Instrumental Support									
Grandiose Narcissism	**.032**	**13.06**	**< .001**	**1.61**	**.18**	**3.61**	**< .001**	**.73**	**2.48**
Adaptive Narcissism	**.023**	**4.59**	**.011**	.46	.07	1.00	.32	-.44	1.36
Maladaptive Narcissism	**.023**	**4.59**	**.011**	.93	.10	1.49	.14	-.30	2.15
Vulnerable Narcissism	.000	.14	.707	.03	.02	.38	.71	-.11	.17
Esteem Support									
Grandiose Narcissism	**.064**	**26.62**	**< .001**	**2.33**	**.35**	**5.16**	**< .001**	**1.44**	**3.21**
Adaptive Narcissism	**.050**	**1.20**	**< .001**	.66	.09	1.42	.16	-.26	1.58
Maladaptive Narcissism	**.050**	**1.20**	**< .001**	**1.45**	**.15**	**2.29**	**.02**	**.21**	**2.70**
Vulnerable Narcissism	.003	1.04	.309	.07	.05	1.02	.31	-.07	.22

Note: Significant results are depicted in bold; [a] degrees of freedom (df) for grandiose and vulnerable narcissism: 1, 392; df for adaptive and maladaptive narcissism: 2, 391.

Is a narcissist's tendency to engage in social support, and its constituent parts, explained by their high agency (i.e., their belief that social support is a weakness and not healthy), low communion (i.e., their perceptions that social support is unavailable), and exploitativeness (i.e., their behaviour to take advantage of others for own benefit)?

I used PROCESS 3.0, model 4 (Hayes, 2018, see Figure 2.1) to test parallel multiple mediation models. Such models allow for the estimation of a total effect, direct effects, and specific indirect effects for multiple mediators, and the examination of pairwise contrasts between specific indirect effects. In total, I tested 20 models to examine the various relationships between different types of narcissism (e.g., grandiose, adaptive, maladaptive, and vulnerable) on the use of social support (i.e., total, emotional, informational, instrumental, and esteem support), via the motivations for (not) using social

support (perceived availability of social support [*PASS*], and the perceptions that seeking support is perceived as a *weakness*, an opportunity to manipulate and *exploit* others, and that it is natural and *healthy*).

In these multiple mediation models, to compute the coefficients, I used Ordinary Least Squares (OLS) regressions with bootstrapping. The models display the direct effects between predictor (X) and mediators (M_1 & M_k; paths a_1 and a_k, see Figure 2.1); between the mediators and outcome variable (Y; paths b_1 and b_k); a direct effect between predictor and outcome variable independent of the mediators (path c'), as well as a total effect of predictor on outcome variable (path c). Finally, I computed indirect effects of predictor on outcome variable via the mediators (i.e., the indirect effect of $M_1=a_1*b_1$; the indirect effect of $M_k=a_k*b_k$). For these indirect effects, percentile bootstrapped confidence intervals were computed. When this 95% CI did not pass through zero, it suggested there was a significant indirect effect via the specific mediator.

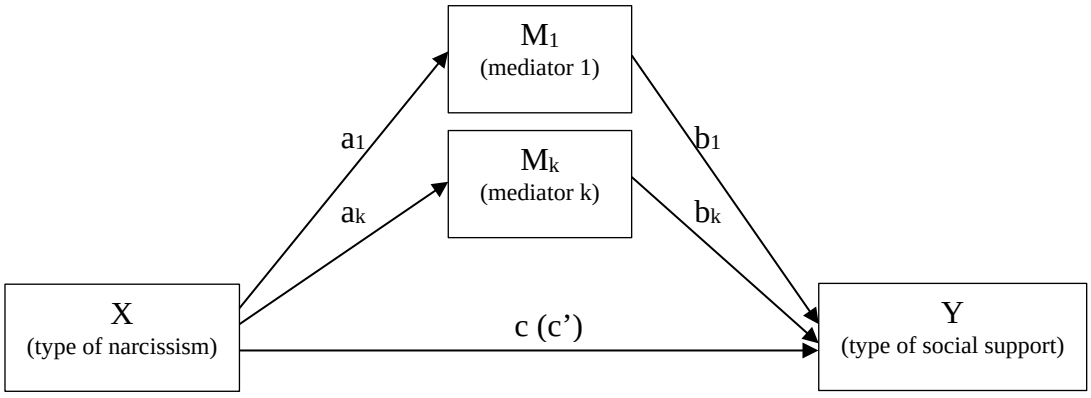


Figure 2.1 Conceptual representation of a simple first class mediation model with two mediators (M_1 and M_k).

2.4.4.1 Overall Grandiose Narcissism

I conducted a multiple mediation analysis using OLS path analysis to explain how level of overall grandiose narcissism predicted use of social support via the proposed pathways (see Table A2.3 and Figure B2.1).

This model was significant, F (5, 388) = 69.86, p <.001, with a significant total effect of narcissism on use of social support, and the total model explaining 47.83% of the variance in use of social support. However, narcissism did not predict use of social support independent of its effect via the proposed mediators. Figure B2.1 revealed that narcissism was positively associated with belief that using social support is an opportunity to manipulate and exploit another person and that this willingness to exploit others is positively associated with using social support. The paths between narcissism and all other mediators were non-significant. However, two of these mediators positively and significantly predicted use of social support: healthy, and the perceived availability of social support.

The mediation analyses showed that narcissism indirectly predicted use of social support via the perception that seeking social support is an opportunity to manipulate and exploit others (see Table A2.3). A percentile bootstrap confidence interval for this effect, based on 10,000 bootstrap samples was entirely above zero. Contrastingly, narcissism did not indirectly predict the use of social support via the perceptions that seeking social support is perceived as a weakness, the perception that seeking social support is natural and healthy, or the perceived availability of social support.

Given that social support can be divided into four different subcategories, additional mediation models were conducted where the outcome variable was one of the subcategories: emotional, informational, instrumental, and esteem support. The four mediation models explained between 33.48% and 45.25% of the variance between narcissism and use of a specific subtype of social support (see Table A2.4 for full details).

Figure B2.2 displays the directions and strengths of all the direct paths in the different models. Only significant indirect effects via the perception that using social support is an opportunity to manipulate and exploit people were found.

2.4.4.2 Adaptive Narcissism

The model testing the link between adaptive narcissism and use of overall social support, whilst controlling for maladaptive narcissism, via the four mediators was significant, F (6,387) = 57.96, p < .001 (see Table A2.5 and Figure B2.3). The total model explained 47.33% of the variance in use of social support, and there was only a marginal total effect of narcissism on use of social support. However, this model did not provide evidence that scoring higher on adaptive narcissism predicted use of social support independently of its effects via the proposed mediators.

Still, when focusing on all the individual paths within this mediation model (Figure B2.3), it was shown that people scoring high on adaptive narcissism perceived social support less as a weakness, but as healthy, and available. There was no significant path between adaptive narcissism and the perception that social support is an opportunity to manipulate and exploit people. Furthermore, as with grandiose narcissism, use of social support was predicted by the perception that social support is an opportunity to manipulate and exploit others, and natural and healthy, as well as the perceived availability of social support. Thus, these motivations predicted greater use of support-seeking.

The mediation analyses further showed that adaptive narcissism indirectly predicted higher intentions to use social support through the perceptions that seeking social support is natural and healthy, and the perceived availability of social support. Finally, the indirect effects from adaptive narcissism, via the perception that asking for social support is a weakness or an opportunity to exploit other people were not significant.

The four mediation models focussing on the use of different subtypes of social support by high adaptive narcissists (whilst controlling for maladaptive narcissism)

explained between 33.39% and 45.04% of the variance in each subtype (see Table A2.6). The results were similar to those of the mediation model between adaptive narcissism and overall use of social support. Full details of the direct and indirect paths in these models are displayed in Table A2.6, and Figure B2.4.

2.4.4.3 Maladaptive Narcissism

The same mediation models as described in the previous sections were conducted to test the effect maladaptive narcissism (whilst controlling for the influence of adaptive narcissism) exerts on use of social support (see Table A2.7 - Table A2.8, Figure B2.5 - Figure B2.6)

The model testing the link between maladaptive narcissism and use of overall social support, whilst controlling for adaptive narcissism, via the four mediators was significant, F (6,387) =57.96, $p < .001$ (see Table A2.7 and Figure B2.5), and explained 47.33% of the variance in use of social support. There was neither a total effect of narcissism on use of social support, nor did the model provide evidence that scoring higher on maladaptive narcissism predicted use of social support independently.

Direct and indirect paths of the model were examined in the model (see Table A2.7 and Figure B2.5). High-scoring maladaptive narcissists perceived social support as a weakness, and as an opportunity to exploit and manipulate others. They also perceived social support as less available to them. As in grandiose narcissism and adaptive narcissism, the opportunity to exploit others, perceiving support seeking as natural and healthy, and perceive support as available were all associated with higher support seeking.

The mediation analyses further showed that maladaptive narcissism indirectly predicted intentions to use overall social support *positively* through the perception that seeking social support is an opportunity to *exploit* or manipulate others. The other indirect effects were not significant.

When focussing on the use of different subtypes of social support these four mediation models explained between 33.39% and 45.04% of the variance in use of a subtype of social support by maladaptive narcissists (whilst controlling for adaptive narcissism). The effects remain quite similar to overall social support (see Table A2.8, and Figure B2.6), and the differences lay in maladaptive narcissists' use of emotional and information support: the effect of maladaptive narcissism on these subtypes of social support is not exerted via the perception that social support is a weakness.

2.4.4.4 Vulnerable Narcissism

Finally, the same models were tested again, but with vulnerable narcissism as the predictor (see Table A2.9 and Figure B2.7). The model testing the use of overall social support was significant, F (5, 388) = 70.43, p <.001, and the total model explained 47.58% of the variance in use of social support. However, it did not provide evidence for a total effect of vulnerable narcissism on use of overall social support, or that scoring higher on narcissism predicted use of social support independent of its effect via the proposed mediators.

Exploring the breakdown of the direct effects, the mediation analyses revealed that people scoring higher on vulnerable narcissism perceived asking for social support as a *weakness* and as an opportunity to *exploit* another person. Additionally, they perceived asking for support as unnatural or un*healthy* and support as being unavailable (*PASS)*. Examination of the direct effects from the motivations to the use of social support showed that three motivations for using social support predicted use of social support: opportunity to exploit other people, seeing support as healthy, and the perceived availability of social support (see Table A2.9 and Figure B2.7).

The mediation analyses further showed that narcissism indirectly predicted use of social support *positively* through the perception that seeking social support is an opportunity to manipulate and exploit others and that vulnerable narcissism *negatively*

predicted use of social support via the perception that seeking social support is natural and healthy, or the perceived availability of social support).

When focussing on the use of different subtypes of social support, these models explained between 33.44% and 44.87% of the variance in use of a subtype of social support. The direct and indirect effects in these models were quite similar to total social support (for full details, see Table A2.10 and Figure B2.8).

2.4.4.5 Summary

The 20 mediation models just described produced a variety of results. However, in these models, there was some information that was identical in one or more models, and therefore a simplified summary directly comparing between the mediation models of the four different types of narcissists is helpful.

Grandiose narcissists perceived support seeking as an opportunity to manipulate and exploit other people. Yet, when focussing on the breakdown of narcissism into its adaptive and maladaptive components, more nuanced results emerged. Adaptive narcissists did not perceive social support as an opportunity to manipulate and exploit people. Instead, they were less likely to perceive social support as a weakness, and more likely to perceive social support as healthy and available. Maladaptive narcissists perceived support seeking as a weakness and as an opportunity to exploit others, but not as being available. Finally, vulnerable narcissists perceived asking for support as a weakness, as an opportunity to exploit, and as unhealthy and as unavailable.

When exploring the significant indirect effects on use of (subtype) of social support depending on type of narcissism as predictor via the four motivations to (not) use social support, different patterns emerge (see Table 2.4).

For grandiose narcissists, the opportunity to exploit others was the only significant motivator explaining use of all types of social support in the model.

For adaptive narcissists, there was no significant indirect effect explaining use of social support via the opportunity to exploit other people, but there were significant indirect effects via the motivations that using social support is healthy and available.

For maladaptive narcissists, a different pattern emerged. Despite a negative indirect effect via the perceived availability of social support (i.e., they did not perceive support as available, but used it anyway), there was a significant positive indirect effect via the perception that using support is an opportunity to exploit other people, which increased use of all types of social support.

For vulnerable narcissists, there were significant positive indirect effects via the perception that asking social support is an opportunity to exploit others (i.e., more likely to see it as opportunity to exploit, therefore more likely to use it). Additionally there were significant negative indirect effects via the perceptions that asking for support is natural and healthy, and via the perceived availability that social support is available. That is, despite perceiving social support as unavailable and unhealthy, vulnerable narcissists used it anyway.

Table 2.4
Significant Indirect Effects from Narcissism to Use of Overall Social Support, and the Four Subtypes of Social Support

	Grandiose					Adaptive					Maladaptive					Vulnerable				
	OVERALL	Emotional	Informational	Instrumental	Esteem	OVERALL	Emotional	Informational	Instrumental	Esteem	OVERALL	Emotional	Informational	Instrumental	Esteem	OVERALL	Emotional	Informational	Instrumental	Esteem
Weakness																				
Exploit	+	+	+	+	+						+	+	+	+	+	+	+	+	+	+
Healthy						+	+	+	+	+						-	-	-	-	-
Availability						+	+	+	+	+	-	-	-	-	-	-	-	-	-	-

Note: + = significant positive indirect effect; - = significant negative indirect effect

2.4.5 Does Type of Stressful Event Moderate the Relationship between Narcissism and Overall Social Support?

To test whether the relationship between narcissism and use of social support is qualified by the type of stressful event experienced, I next included type of stressor as a moderator into the previously run models. That is, a series of first-class moderated mediation model (Hayes, 2018; PROCESS, Model 8) was run with a multicategorical moderator variable (i.e., agentic, communal, external stressor).

To run the analyses with a categorical moderator-variable with three categories, two dummy-coded variables were coded in PROCESS v3.0: one variable compared agentic (coded as +1) with communal stressors (coded as -1), while excluding external stressor (coded as 0); the other variable compared agentic and communal stress (both coded as +0.5) with the external stress (coded as -1).

Figure 2.2 shows the conceptual representation of such a model with a multicategorical variable with two dummy-coded variables, whereas Figure 2.3 shows the statistical model.

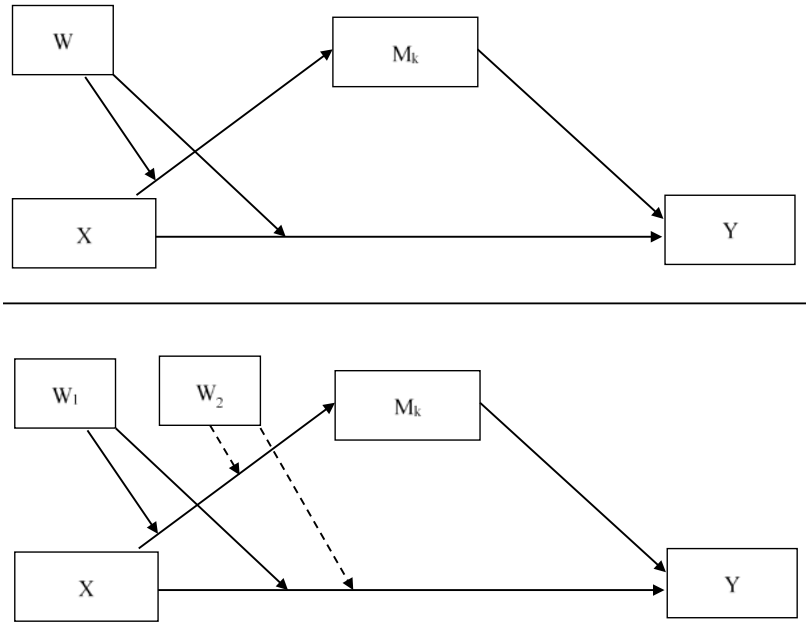


Figure 2.2 Conceptual representation of a simple first class moderated mediation model with one mediator, and one moderator (W; top panel), and the same model but with a categorical moderator variable (W) with three categories, coded into two dummy coded variables (W_1 and W_2; bottom panel).

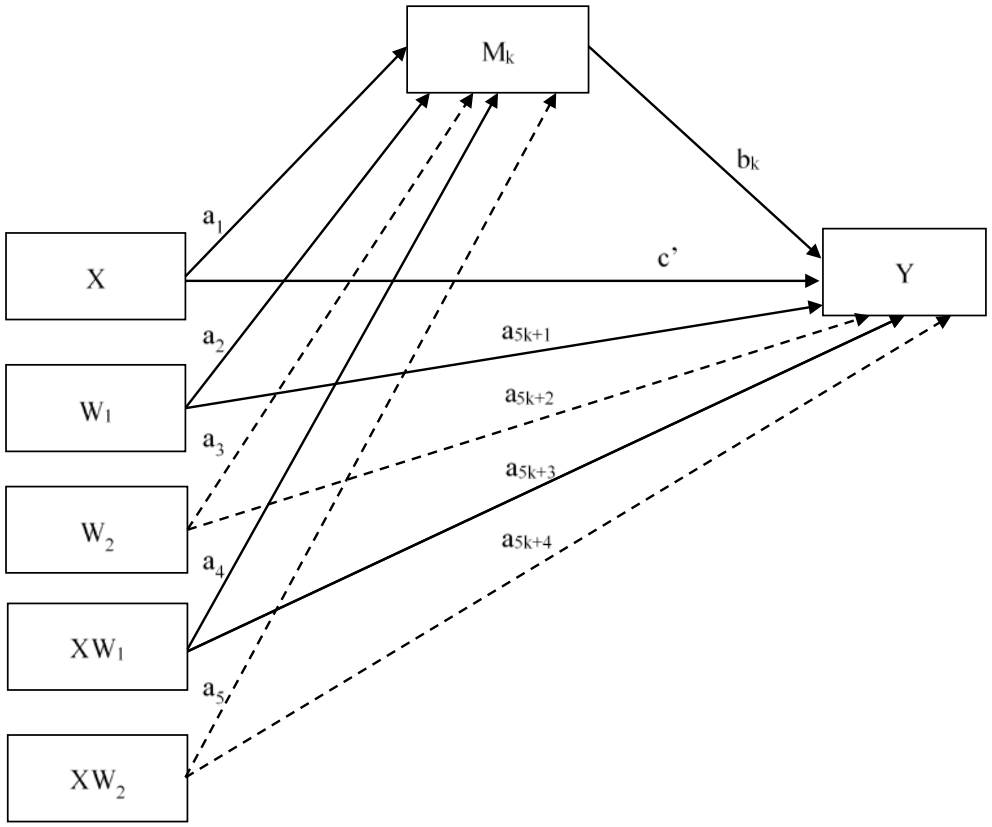


Figure 2.3 Structural representation of a simple first class moderated mediation model with one mediator, and one categorical moderator variable with three categories (coded into two dummy coded variables: W_1 and W_2).

Given that the mediation models described above showed little to no differences between overall social support as an outcome variable and the four subtypes of social support as outcome variables, I decided to restrict moderated mediation analyses to the models including overall social support as outcome variable. Table A2.11 - Table A2.14 display all direct effects between different subtypes of narcissism, the mediators, and the use of overall social support in the top section. In addition to these direct effects, the tables display an index of moderated mediation for each of the mediators in the middle section. This index is important to test whether type of stressor moderates the indirect effect of narcissism on use of Social Support, and indicates whether the comparison made between Agentic and Communal Stressor (W_1), or Agentic and Communal versus External stressors (W_2) had an effect on the direct and indirect effects within the mediation models. Finally, the bottom section of the table displays the conditional indirect effect of narcissism on use of social support via each specific mediator (middle columns), as well as the conditional direct effect of narcissism on use of social support (right column), all depending on type of stressor experienced. These conditional effects are only of interest when the bootstrapped confidence interval of index of moderated mediation does not pass through zero (i.e., there is a significant effect).

2.4.5.1 Grandiose Narcissism

The first-class moderated mediation model testing the use of overall social support with grandiose narcissism as predictor, the four types of motivations to use social support as mediators, and the type of stressor as moderator was significant, F (9, 384) = 38.51, p <.001, with the model explaining 47.44% of the variance in use of social support. Conditional direct effects of grandiose narcissism on use of social support were not significant in any of the three conditions (see Table A2.11, panel with conditional direct effects of X on Y).

The direct effects of narcissism on mediators, and of mediators on support-seeking, largely replicated the mediation results described above (see Table A2.11 and Paragraph 2.4.4.1).

The index of moderated mediation for each of the mediators all had confidence intervals encompassing zero (see Table A2.11, bottom panel), suggesting that there were no significant differences in narcissists' use of social support via the different motivations for using it, depending on type of stressors.

2.4.5.2 Other Types of Narcissism

The moderated mediation model testing the use of social support with adaptive narcissism as the predictor (whilst controlling for the effects of maladaptive narcissism), the four motivations to use social support as mediators, and type of stressor experienced as moderator was significant, F (10, 383) = 34.52, $p < .001$, explaining 47.40% of the variance in use of social support. There was no significant effect of type of stressor on any of the paths in the model, or evidence of moderated mediation. The full details of the individual paths can be found in Table A2.12.

The same moderated mediation model with maladaptive narcissism as the predictor variable (whilst controlling for the effects of adaptive narcissism) was significant, F (10, 383) = 34.46, $p < .001$, explaining 47.36% of the variance in social support. There was no significant effect of type of stressor on the underlying motivations and use of social support (see Table A2.13).

Finally, I tested the same moderated mediation model with vulnerable narcissism as the predictor variable. This model was significant, F (9, 384) = 39.35, $p < .001$, explaining 47.98% of the variance in use of social support. There was no evidence of a significant effect of type of stressor on the use of social support (see Table A2.14).

To conclude, I found no evidence that domain of stressor influenced any of the pathways by which narcissism related to support seeking. However, the examination of

whether narcissists (of all types) use social support during times of stress is only part of the picture. A question remains whether narcissists use other coping strategies when dealing with stressful situations.

2.4.6 Narcissists' Use of Alternative Coping Strategies in Times of Stress

This research is the first to look at alternative coping strategies used by narcissists in times of stress. Given that previous research (e.g., Folkman & Lazarus, 1988) has not always been consistent in classifying different coping-items into overarching coping strategies, it is important to cluster the items before trying to answer this question.

2.4.6.1 Factor Analysis

To cluster the items, I conducted a factor analysis on all the coping items used in this study. For factor analyses, normally-distributed data (free from both univariate and multivariate outliers) is required. In this study, I administered 109 coping-items (23 items from the Behavioural Coping-List, 20 items from the Social Support-Seeking Scale, and 66 items from the Ways of Coping-Revised). If an item does not share variance with any other item, it is not appropriate to include it into a factor analysis. A condition for an item to be included in a factor-analysis is that it should at least have one correlation of > .30 with another item (Tabachnick & Fidell, 2007). In this sample, two coping-items did not meet this criteria ("Smoked a cigarette/tobacco", and "Drew on my past experiences, I was in a similar situation before"). Therefore, I excluded these items from the factor analysis.

Of the remaining 107 items, five had Z-scores that were higher than the cut-off (see Table 2.5). According to Tabachnick and Fidell (2007), an option for outlier reduction is to change the raw score(s) on the variable for the outlying case so that they are deviant, but not as deviant as they were. In this sample it was not possible to do this. Even when raw scores were changed to be equal to the next (extreme) score in the distribution, there would still be issues with Z-scores. When exploring skewness and kurtosis for all items, respectively 6 or 7 items had problematic scores (i.e., < -2, or > +2; Field, 2013; see Table

2.5). When examining these items I discovered that they all had floor effects. An item is said to experience a floor effect when the mean score of that item is close to the low endpoint of the scale (Coolican, 2014). On a response scale of 1-8, an item is said to have a floor effect when the mean score is less than 2. In this sample, 7 out of 107 items had floor effects. These items were identical to the ones that had problems with normality, skewness, and kurtosis. Exploring the content of these items (i.e., drug use, gambling, drinking alcohol), it is perhaps not surprising that the majority of people do not use these coping strategies, and therefore these items would not be expected to be normally distributed. Since this breaks parametric assumptions, non-parametric analyses should be used accordingly. Therefore, following the procedure of Zientek and Thompson (2007), I used Bootstrapped Exploratory Factor Analysis.

Table 2.5

Skewness, Kurtosis, and Z-scores of Problematic Coping Items.

Item:	**Skewness** (SE = .12)	**Kurtosis** (SE = .25)	**Outliers**
… chatted online with someone I didn't know	2.30	4.24	Z = 3.58 n = 9
… went shopping and spent money on impulse purchases	2.70	2.96	Z = 3.76 n = 2
… gambled (anything from lottery, bingo, casino, etc)	3.19	10.07	Z ≥ 3.46 n = 12
… consumed more than 6 alcoholic drinks in one evening	1.98	2.53	n/a
… ate to the point of physical discomfort	2.19	3.71	Z = 3.65 n = 7
… engaged in sexual activities with someone when I really shouldn't	3.24	10.40	Z ≥ 3.82 n = 11
… sought out drugs for personal use (including cannabis)	2.15	3.28	n/a

2.4.6.1.1 Type of Factor Analysis

To ascertain which method of factor analysis would be most appropriate, I tested for multivariate normality (Maximum Likelihood analysis assumes a multivariate-normal

distribution, whereas Principal Axis Factoring does not and can thus be used even when such normality is violated). Calculation of Mahalanobis distances for all respondents based on the 107 items indicated that there were several high values, and thus the data did not have an entirely multivariate normal distribution. Therefore, Principal Axis Factoring was considered most appropriate and expected to provide the most reliable results.

I predicted that my coping-factors would be correlated with one another, thus an oblique oblimin rotation was used, where the factors are simplified by minimizing cross-products of loadings. According to Tabachnick and Fidell (2007, p 646), it is best to test whether or not the assumptions have been met after obtaining the factor structure if the factors correlate with one another. If at least some factors correlate > .32 with one another, there is enough evidence to warrant oblique rotation.

2.4.6.1.2 Results of the Bootstrapped Factor Analysis

I conducted the bootstrapped factor analysis following the procedure of Zientek and Thompson (2007), and based on the screeplot and parallel analysis yielded in 12 factors. After deleting one item that loaded less than .40 on a factor, and 32 items that loaded on multiple factors, I acquired the factor structure as depicted in Table 2.6. Examination of the items within each factor revealed there were two factors (factors 6 and 11) with only one item each. Therefore, I decided not to use these factors in any further analyses. Looking at the remaining ten factors, their corresponding reliability, and the items within each factor, I decided to delete a total of 8 more low-loading items from the factors “Risky Ingestion”, “Mental Escapism”, “Downplaying”, “Anger/Aggression”, and “Active Escapism” (see Table 2.6, items listed in red). I named latent factors by inspecting the items within each factor, and deciphering what their overarching theme was. The Cronbach’s alpha reliability of all factors is depicted in the right-hand column of Table 2.6. When exploring the coping strategies, I can classify them into more helpful (i.e., actively dealing with the problem, increasing functioning), and more harmful (i.e., harmful to the self or others, ignoring the

problem, and only temporarily decreasing stress) coping strategies. The more helpful coping strategies are emotional and esteem support, planful problem solving, informational and instrumental support, considering perspective, and looking for (spiritual) help. Whereas the more harmful coping strategies are risky ingestion, mental escapism, downplaying, and active escapism.

Checking the correlations between the ten developed factors (see Table A2.15), revealed 13 correlations > .32, thus the oblique rotation method can be justified.

Table 2.6

Factor structure of the 12 factors that resulted from the Bootstrapped Factor Analysis (including factor loadings and factor's Cronbach's alpha.

Factor #	Name	Items	Loadings	Cronbach's Alpha
1	Emotional and Esteem Support	… I sought comfort from other people.	0.94	.93
		… I relied on others for comfort.	0.94	
		… I leaned on others for emotional support.	0.93	
		… I looked for someone to cheer me up.	0.92	
		… I sought the company of people who think highly of me.	0.87	
		… I tried to be around someone who has confidence in me.	0.85	
		… I knew others would make me feel worthwhile.	0.85	
		Accepted sympathy and understanding from someone.	0.82	
		… I turned to someone to remind me that I am a worthy person.	0.82	
		Talked to someone about how I was feeling.	0.78	
		… Talked face-to-face with someone I am close to.	0.75	
		… Talked on the phone with someone I am close to.	0.72	
		I let my feelings out somehow.	0.66	
		… Chatted online with a friend (e.g., Facebook).	0.57	
		… I asked people to remind me of my good points.	0.53	
2	Risky Ingestion	… Found it difficult to stop eating once I had started	0.90	.78
		… Ate to the point of physical discomfort	0.89	(.81)
		… Ate 'comfort' food.	0.88	
		Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, etc.	0.81	
		… Sought out drugs for personal use (including cannabis).	0.70	
		… Played a computer game in which you can score points or win.	0.50	

Table 2.6 (continued)

3	Planful Problem Solving	I knew what had to be done, so I doubled my efforts to make things work.	0.93	.79
		I made a plan of action and followed it.	0.90	
		Came up with a couple of different solutions to the problem.	0.85	
		I came out of the experience better than when I went in.	0.81	
		Just concentrated on what I had to do next – the next step.	0.68	
		I accepted the next best thing to what I wanted.	0.57	
4	Mental Escapism	Had fantasies or wishes about how things might turn out.	0.88	.84
		I daydreamed or imagined a better time or place than the one I was in.	0.83	(.83)
		Wished that the situation would go away or somehow be over with.	0.82	
		… Withdrew from people and just be on my own.	0.81	
		Wished that I could change what had happened or how I felt.	0.79	
		I prepared myself for the worst.	0.77	
		Kept others from knowing how bad things were.	0.74	
		Hoped a miracle would happen.	0.72	
		Avoided being with people in general.	0.70	
		… Escaped reality by watching TV / movie or reading a book.	0.63	
		I tried to keep my feelings to myself.	0.63	
		… Avoided eating when hungry.	0.61	
		I went over in my mind what I would say or do.	0.58	
		… Compared myself to people who are worse off.	0.42	
		I did something which I didn't think would work, but at least I was doing something.	0.41	
5	Downplaying	Accepted it, since nothing could be done.	0.81	.71
		Didn't let it get to me; refused to think too much about it.	0.79	(.69)
		Went along with fate; sometimes I just have bad luck.	0.76	
		Went on as if nothing had happened.	0.75	
		Made light of the situation; refused to get too serious about it.	0.75	
		I told myself things that helped me to feel better.	0.57	

Table 2.6 (continued)

6	-	Bargained or compromised to get something positive from the situation.	-0.54	
7	Anger / Aggression	… Got aggressive.	0.90	.76
		… Took it out on people around me (e.g., picked a fight, was grumpy or impatient).	0.85	(.78)
		Took it out on other people.	0.82	
		… Got angry.	0.80	
		Took a big chance or did something very risky.	0.56	
8	Informational and Instrumental Support	… I turned to others for guidance on how to solve problems.	0.93	.91
		… I asked others for advice.	0.91	
		… I asked for help.	0.90	
		… I asked others what they would do.	0.88	
		… I found others' advice helpful, in solving the problem(s).	0.84	
		Talked to someone to find out more about the situation.	0.83	
		Talked to someone who could do something concrete about the problem.	0.80	
		… I asked people to help out by doing things for me.	0.61	
9	Active Escapism	… Did some sport or exercise.	-0.84	.70
		I jogged or exercised.	-0.83	(.74)
		Got away from it for a while; tried to rest or take a vacation.	-0.63	
		… Chatted online with someone I didn't know (e.g., internet forum or chat room).	-0.50	
10	Considering Perspective	Turned to work or substitute activity to take my mind off things.	-0.82	.57
		I changed something about myself.	-0.69	
		I tried to analyze the problem in order to understand it better.	-0.61	
11	-	Realized I brought the problem on myself.	0.80	
12	Looking for (spiritual) Help	Found new faith.	0.79	.60
		I prayed.	0.70	
		I got professional help.	0.61	

Please note: items in red were deleted before running moderation analyses. Alpha's in brackets are statistics for shortened factors.

2.4.7 Does Type of Narcissism Predict Use of Coping Strategies?

To test the hypothesis that narcissists use different coping strategies in times of stress, I ran simple regression models with each type of narcissism as predictors and all coping strategies as outcome variables (see Table 2.7). The models with adaptive and maladaptive narcissism control for the other subtype of narcissism.

These simple regressions were not all significant, and explained up to 9.9% of the variance in use of a coping style. Higher grandiose narcissism was associated with significantly more use of emotional and esteem support, risky ingestion, planful problem solving, downplaying, informational and instrumental support, anger/aggression, and looking for (spiritual) help.

When exploring the breakdown of adaptive and maladaptive narcissism, i found that the models for emotional and esteem support, risky ingestion, planful problem solving, downplaying, anger/aggression, active escapism, and looking for (spiritual) help were significant. However, in emotional and esteem support, downplaying, informational and instrumental support, and active escapism neither dimension of narcissism was a significant predictor on its own. This implies their shared variance is associated with this result, not their unique variance. Higher adaptive narcissism was associated with significantly more use of, planful problem solving, but no increase or decrease in any of the other coping strategies. Higher maladaptive narcissism was associated with significantly more use of risky ingestion, mental escapism, anger/aggression, and looking for (spiritual) help. Finally, higher vulnerable narcissism was associated with more use of risky ingestion, mental escapism, anger/aggression, and less use of planful problem solving. For the coping style considering perspective none of the types of narcissism were a significant predictor.

Table 2.7

Associations Between Each Type of Narcissism as Predictor and Each Coping Style as Outcome Variable

	R^2	F [a]	p	B	β	t	p	95% CI of B	
								LL	UL
Emotional and Esteem Support									
Grandiose Narcissism	**.034**	**13.70**	**< .001**	**1.52**	**.18**	**3.702**	**< .001**	**.71**	**2.33**
Adaptive Narcissism	**.026**	**5.20**	**.006**	.75	.12	1.77	.08	-.09	1.58
Maladaptive Narcissism	**.026**	**5.20**	**.006**	.50	.06	.87	.39	-.63	1.63
Vulnerable Narcissism	.000	.83	.825	.01	.01	.22	.83	-.11	.14
Risky Ingestion									
Grandiose Narcissism	**.014**	**5.42**	**.020**	**.85**	**.12**	**2.33**	**.02**	**.13**	**1.57**
Adaptive Narcissism	**.034**	**6.98**	**.001**	-.57	-.10	-1.54	.12	-1.31	.16
Maladaptive Narcissism	**.034**	**6.98**	**.001**	**1.80**	**.24**	**3.58**	**< .001**	**.81**	**2.80**
Vulnerable Narcissism	**.099**	**42.87**	**< .001**	**.36**	**.31**	**6.55**	**< .001**	**.25**	**.46**
Planful Problem Solving									
Grandiose Narcissism	**.041**	**16.67**	**< .001**	**1.51**	**.20**	**4.08**	**< .001**	**.78**	**2.24**
Adaptive Narcissism	**.043**	**8.77**	**< .001**	**1.24**	**.22**	**3.27**	**.001**	**.49**	**1.99**
Maladaptive Narcissism	**.043**	**8.77**	**< .001**	-.10	-.01	-.19	.85	-1.11	.92
Vulnerable Narcissism	**.019**	**7.65**	**.006**	**-.16**	**-.14**	**-2.77**	**.01**	**-.28**	**-.05**
Mental Escapism									
Grandiose Narcissism	.003	1.09	.298	.38	.05	1.04	.30	-.34	1.09
Adaptive Narcissism	.015	2.93	.055	-.60	-.11	-1.63	.10	-1.33	.12
Maladaptive Narcissism	.015	2.93	.055	**1.21**	**.16**	**2.42**	**.02**	**.23**	**2.20**
Vulnerable Narcissism	**.190**	**.19**	**< .001**	**.49**	**.44**	**9.60**	**< .001**	**.39**	**.59**
Downplaying									
Grandiose Narcissism	**.029**	**11.86**	**.001**	**1.24**	**.17**	**3.44**	**< .001**	**.53**	**1.94**
Adaptive Narcissism	**.021**	**4.21**	**.016**	.48	.09	1.28	.20	-.25	1.21
Maladaptive Narcissism	**.021**	**4.21**	**.016**	.56	.07	1.11	.27	-.43	1.55
Vulnerable Narcissism	.003	1.13	.289	.06	.05	1.06	.29	-.05	.17
Anger/Aggression									
Grandiose Narcissism	**.017**	**6.98**	**.009**	**1.00**	**.13**	**2.64**	**.01**	**.26**	**1.74**
Adaptive Narcissism	**.037**	**7.61**	**.001**	-.54	-.09	-1.41	.16	-1.30	.22
Maladaptive Narcissism	**.037**	**7.61**	**.001**	**1.91**	**.24**	**3.66**	**< .001**	**.89**	**2.94**
Vulnerable Narcissism	**.093**	**4.17**	**< .001**	**.36**	**.31**	**6.34**	**< .001**	**.25**	**.47**
Informational and Instrumental Support									
Grandiose Narcissism	**.012**	**4.68**	**.031**	**.99**	**.11**	**2.16**	**.031**	**.09**	**1.88**
Adaptive Narcissism	.009	1.73	.179	.61	.09	1.29	.198	-.32	1.53
Maladaptive Narcissism	.009	1.73	.179	.10	.01	.16	.88	-1.15	1.35
Vulnerable Narcissism	.000	.04	.84	.01	.01	.20	.84	-.13	.16
Active Escapism									
Grandiose Narcissism	**.061**	**25.34**	**< .001**	**2.24**	**.25**	**5.03**	**< .001**	**1.37**	**3.12**
Adaptive Narcissism	**.044**	**8.99**	**< .001**	.82	.12	1.77	.08	-.09	1.73
Maladaptive Narcissism	**.044**	**8.99**	**< .001**	1.08	.11	1.73	.09	-.15	2.31
Vulnerable Narcissism	.006	2.37	.124	.11	.08	1.54	.12	-.03	.25
Considering Perspective									
Grandiose Narcissism	.001	.26	.614	.22	.03	.51	.61	-.63	1.06
Adaptive Narcissism	.001	.12	.889	.21	.03	.49	.63	-.65	1.08
Maladaptive Narcissism	.001	.12	.889	-.20	-.02	-.33	.74	-1.37	.98
Vulnerable Narcissism	.000	.00	.948	.00	.00	-.07	.95	-.14	.13
Looking for (spiritual) Help									
Grandiose Narcissism	**.024**	**9.80**	**.002**	**1.28**	**.16**	**3.13**	**.002**	**.48**	**2.08**
Adaptive Narcissism	**.024**	**4.88**	**.008**	-.02	.00	-.05	.96	-.85	.80
Maladaptive Narcissism	**.024**	**4.88**	**.008**	**1.36**	**.16**	**2.38**	**.02**	**.24**	**2.48**
Vulnerable Narcissism	.000	.03	.862	.01	.01	.17	.86	-.12	.14

Note: Significant results are in Bold; [a] degrees of freedom for grandiose and vulnerable narcissism: 1, 392; for adaptive and maladaptive narcissism: 2, 391.

2.4.8 Does Type of Stressful Event Moderate the Relationship Between Narcissism and Use of Coping Strategies?

To test the hypothesis that narcissists' use of different coping styles depends on type of stressor experienced, I conducted simple moderation analyses with narcissism as focal predictor, type of stressor as moderator, and coping style as outcome variable.

The moderator was a categorical variable with three levels (i.e., agentic, communal, and external stressor), and so I specified in PROCESS v3.0 (Hayes, 2018) which groups I wanted to compare. As above, I compared agentic (coded as +1) with communal stressors (coded as -1), while excluding external stressor (coded as 0). Additionally, I compared agentic and communal stress (both coded as +0.5) with the external stress (coded as -1).

I conducted simple moderation analyses (Hayes, 2018; Model 1) for each of the 10 factors created using bootstrapped factor analyses. Table A2.16 - Table A2.19 depict the results of these moderation analyses, and show the effects of different type of narcissism on each coping strategy, depending on type of stressor (i.e., agentic, communal, or external). As with the mediation models, I ran these moderated mediation models for overall grandiose narcissism, adaptive narcissism, maladaptive narcissism, and vulnerable narcissism, leading to 40 simple moderation models (see Table A2.16 - Table A2.19, and Figure B2.9 - Figure B2.12). Due to this large number of models, I describe only significant models in detail.

2.4.8.1 Grandiose Narcissism

I depict the results of the analyses on grandiose narcissism and use of coping style depending on type of stressor (agentic, communal, external) in Table A2.16 and Figure B2.9. For example, the model that explains use of downplaying explained 5.30% of the variance and was significant, F (5, 388) = 4.34, $p < .001$. Of this explained variance, 1.67% was based on the interactions between narcissism and type of stressor ($\Delta R^2 = .0167$, F (2,387) = 3.43, $p = .034$), suggesting that there was a significant part of the moderation

model accounted for by the interaction of the three different stressors in combination with narcissism. In breaking down the interaction, the effect of grandiose narcissism on use of downplaying was not significant when participants recalled an agentic stressor (B = .05, CI [-1.18, 1.29]), but was significant in both the communal and external stressor condition (respectively, B = 2.40, CI [1.14, 3.65], B = 10.31, CI [0.15, 2.47]; see Table A2.20, and Figure B2.9). Higher narcissism was linked to more use of downplaying when experiencing communal or external stressors.

Furthermore, I examined effects of the stressor at low (-1SD), medium (mean), and high (+1SD) levels of grandiose narcissism. Only one significant difference emerged in the use of downplaying, with individuals scoring lower in grandiose narcissism: Lower grandiose narcissists used significantly more downplaying as a coping strategy (B = .30, *p* = .026, CI [.04, .57]) when they recalled an agentic stressor (compared to those experiencing a communal stressor; see Table A2.21). For individuals scoring medium or high on grandiose narcissism, there was no significant difference in use of downplaying depending on type of stressor.

The remaining models that have significant variance explained for that coping style (emotional and esteem support, planful problem solving, anger/aggression, active escapism, and looking for [spiritual] help), did not have a significant change in variance based on the moderation effect of the stressors. The final remaining models testing for use of risky ingestion, mental escapism, informational and instrumental support, and considering perspective did not have any significant additional variance explained depending on type of stressor experienced (see Table A2.16).

2.4.8.2 Adaptive Narcissism

Results of the analyses examining the effect of adaptive narcissism (whilst controlling for maladaptive narcissism) on use of different coping styles, depending on type of stressor are depicted in Table A2.17 and Figure B2.10.

The model that explains use of downplaying as a coping style was significant, F (5, 388) = 3.53, p = .002, and accounted for 5.19% of the variance. Of this variance, 2.45% was explained by the type of stressor experienced (ΔR^2= .0245, F (2, 387) = 2.45, p = .007), suggesting that a significant part of this moderation model was explained by the interaction of narcissism and type of stressor experienced. In breaking down these interactions, it was identified that experiencing a communal stressor was associated with significantly greater use of downplaying (B = 1.78, CI [.58, 2.97]), but there was no significant effect when experiencing the agentic or external stressor (see Table A2.20 & Figure B2.10). I then tested for differences among low (-1SD), medium (M), and high (+1SD) levels of adaptive narcissism. Only participants scoring low on adaptive narcissism used significantly lower levels of downplaying when experiencing a communal stressor compared to low adaptive narcissists experiencing an agentic stressor. High adaptive narcissists used significantly higher levels of downplaying when experiencing a communal stressor compared to high adaptive narcissists that experienced an agentic stressor (see Table A2.21 and Figure B2.10).

The remaining significant moderation models for each coping style depending on level of adaptive narcissism (risky ingestion, planful problem solving, anger/aggression, and active escapism) did not have a significant change in variance that is explained by the different stressors (see Table A2.17), therefore, no breakdown was examined. The final remaining models testing for use of emotional and esteem support, mental escapism, informational and instrumental support, considering perspective, and looking for (spiritual) help were not significant.

2.4.8.3 Maladaptive Narcissism

Table A2.18 and Figure B2.11 depict the results of the moderation analyses for maladaptive narcissism on all of the coping styles. Even though five of the models (i.e., risky ingestion, planful problem solving, downplaying, anger/aggression, and active

escapism) were significant and explained up to 7.41% of the variation in that outcome variable, there was no significant change in the variance explained due to the type of stressor experienced. Therefore, there was no justification for examining further differences depending on type of stressor.

2.4.8.4 Vulnerable Narcissism

Finally, the results of the moderation analyses for vulnerable narcissism are depicted in Table A2.19 and Figure B2.12. Only five of these models were significant (i.e., risky ingestion, planful problem solving, mental escapism, anger/aggression, and considering perspective), but none of these models had a significant change in their variance depending on type of stressor experienced. The other models were not significant.

2.5 Discussion

This study was the first to investigate the use of different coping styles by narcissists in times of stress, and I identified narcissists use of social support in times of stress, while distinguishing between different [sub]types of narcissists) and identified their reasons to use or not use social support; I further examine whether this relations depended on type of stressor experienced [agentic, communal, external]. Furthermore, I identified other coping strategies that narcissists use in times of stress; and examined whether use of these other coping strategies are qualified by type of stressor experienced. In this study, I hypothesised that higher narcissism, irrespective of which subtype, would be associated with reduced use of social support in times of stress. Yet, grandiose narcissism was associated with seeking social-support, whereas the unique variances of adaptive and maladaptive components of narcissism, and vulnerable narcissism were not. This finding might be indicative that social support is so universally beneficial to grandiose narcissists, that they use it despite interpersonal alienation (Paulhus, 1998), however the adaptive and maladaptive components of grandiose narcissism by itself are not sufficient enough to use social support in times of stress, and it is only their combined effect that leads to use of

social support. Vulnerable narcissism was not associated with use of overall support. This could be due to the previous finding that vulnerable narcissists may be disliked due to their defensiveness (Czarna et al., 2014), however, as I did not examine how narcissists are viewed by others, this is only speculative. Another possibility is that vulnerable narcissists are more avoidance-orientated (NSM; Krizan & Herlache, 2018), and this avoidance leads them to avoid or withdraw from situations that require them to use social support.

Exploring the breakdown between different types of social support, I expected narcissists, if necessary, to prefer instrumental or esteem support, and not emotional and informational support. Partially in line with these expectations, I found that grandiose narcissism was associated with greater seeking of emotional, instrumental, and esteem support, but not informational support. Vulnerable narcissism was not directly associated with greater use of any subtype of social support. Adaptive components of narcissism were associated with more informational support, whereas maladaptive components of narcissism were associated with more use of esteem support. These findings are mostly consistent with the expectations based on theoretical differences between grandiose narcissism, and its subcomponents adaptive and maladaptive narcissism, as identified by Raskin and Terry (1988), and Barry and colleagues (Barry et al., 2007; Barry & Malkin, 2010).

Three of the four perceptions of seeking social support were associated with greater use of social support (perceiving it as available, as natural and healthy, or an opportunity to exploit others). Further analyses to examine distinctions among grandiose, adaptive, maladaptive, and vulnerable aspects of narcissism nuanced these results. Where grandiose narcissists only perceived using social support as an opportunity to exploit other people, those with higher adaptive narcissism perceived social support as available, healthy, and not as a weakness. Participants scoring higher on maladaptive narcissism perceived support as unavailable, as a weakness, and a necessity to manipulate and exploit others, whereas

vulnerable narcissists saw asking for support as a weakness, as an opportunity to exploit other people, and as neither healthy, nor available. Thus, grandiose narcissists used more social support, because they saw it as an opportunity to exploit other people, and this was driven by the maladaptive components of narcissism. Furthermore, maladaptive narcissists were less likely to use of social support was reduced because they did not perceive it as available. Adaptive narcissists showed an increase in use of social support via the perceptions that it was healthy and available. Vulnerable narcissists showed an increase in use of social support because they saw asking for support as an opportunity to exploit others, however, this effect was reduced by the negative effects via the perceptions that use of social support was perceived as unhealthy and unavailable.

I also hypothesised that use of social support would be qualified by type of stressor experienced (i.e., agentic, communal, external). Results suggested that use of social support was consistent across different types of stressors experienced. This might mean that type of stressor itself is not important for narcissists dealing with stress. It might be that the perceived strength of a stressor is more important than type of stressor. The idea of strength of stressor is supported by previous research showing that narcissists' generate more stressful experiences (Orth & Luciano, 2015) and show greater physiological reactions to stress (Edelstein et al., 2010). Here, however, I did not find differences in experienced stressfulness resulting from different type of stressors, so I could not test whether level of stressfulness resulting from a stressor had an effect.

In addition to using social support as a coping strategy, I explored other coping styles that narcissists might use in times of stress, and investigated potential differences in these other coping styles depending on type of stressor experienced. Factor analyses suggested 10 coping styles. I tested to what extent narcissists report using these in times of stress. Furthermore, I provided evidence that adaptive and maladaptive components of narcissism were associated with use of different coping styles in response to different

stressors. Even though there was not always a conditional effect of narcissism on coping style between agentic, communal, or external stressors, there were differences when comparing the coping styles used by grandiose narcissists, adaptive narcissists, and maladaptive narcissists. For example, higher grandiose narcissism, driven by the more adaptive components, was associated with greater use of downplaying, and there was a significant difference depending on type of stressor experienced. However, in all other models, type of stressor did not seem to be an important factor when predicting narcissists' responses to stress.

2.5.1 Implications and Limitations

This research focused on narcissistic coping with stressful situations. There were differences between adaptive and maladaptive components of narcissism. In line with previous research, maladaptive narcissists engaged in riskier behaviours, such as risky ingestion (e.g., aggression, substance abuse, unsafe sex; Barry et al., 2007; Back et al., 2010; Hepper et al., 2014). As an extension of this previous research, I identified that this is exacerbated in times of stress. Contrastingly, adaptive narcissism was associated with increased use of planful problem solving in times of stress; which is consistent with their need to be independent and self-confident (Barry et al., 2007). These different findings for adaptive and maladaptive narcissists highlight the importance of distinguishing between different types of narcissism.

The study has limitations which can be addressed in future research. First, it was conducted online. Such data collection typically provides credible information (Behrend, Sharek, Meade, & Wiebe, 2011). To maximise credibility, I excluded from the analyses participants who did not follow instructions (Oppenheimer et al., 2009). Regardless, alternative data collection methods (e.g., in a laboratory setting) would help to further increase the credibility of results.

Further, I used a between-subjects design, measuring participants' coping strategies after the recall of one specific event. I implemented this design to compare use of coping strategies depending on different stressors. However, asking participants to report the most stressful event retrospectively (i.e., an event that happened in the past month), and allocating them to a specific condition (i.e., agentic, communal, external), might have resulted in them reporting not the most stressful event that happened overall, but only in that specific time-frame and condition. Setting a specific time-frame (i.e., a month) from when the stressful event occurred could have influenced participants' perceptions of the event, as they may have had more retrospective information regarding this specific event (e.g., how they coped with it and how successful they were in dealing with it). To reduce this retrospectivity of the described stressful event, it is important to focus on the use of social support and other coping strategies on a more daily basis in a follow-up study. Given that use of coping styles did not always differ depending on type of stressor, researchers could ask participants to report the most stressful event that occurred on a daily basis. Measuring individual differences via a diary study may produce reliable information about both within-person processes and between-person differences (Bolger, Davis, & Rafaeli, 2003; Nezlek, 2012).

Additionally, previous research has found that grandiose narcissists are psychological healthy (Sedikides et al., 2004). However, such research did not distinguish between adaptive and maladaptive narcissists, and did not examine vulnerable narcissists. As the current research has provided evidence to support the distinction between adaptive and maladaptive narcissists, and how they cope with stress, a next step would be to focus on potential differences in narcissists' well-being too. Could it be that adaptive and maladaptive components of narcissism are associated with variation in psychological well-being?

This study established that, apart from social support, narcissists use a variety of other coping styles. As this was not the primary aim of this study, I did not include mediators that would explain the pattern of effects found. Therefore, a next step would be to try to understand the mechanisms associated with the different coping styles.

To conclude, narcissists do use social support in times of stress, but the reasons for using (subtypes of) social support, and the level of use of this coping style, depend on type of narcissism.

Chapter 3 Study 2 – What Explains Narcissists' Use of Coping Styles and What are the Consequences for Well-being?

3.1 Introduction

There is a dearth of research on how narcissists cope with stress. The results of Study 1 showed that narcissists use social support, as well as a range of other coping strategies in times of stress. Study 2 attempts to validate the observed mediation results of Study 1 and also extend this research by (1) identifying other mechanisms that underlie the use of the other coping strategies apart from social support, (2) using a different research design to address prior limitations, (3) and exploring the consequences of coping styles on well-being.

3.1.1 Narcissists' Tendencies When Coping with Stress

Study 2, like Study 1, tested the motivations narcissists have to use social support in times of stress. Despite not finding significant indirect effects via all mediators in Study 1, I included all mediators. Again, in this Study, I hypothesised that the support-seeking of narcissists would be mediated by their high agency (i.e., their belief that social support is a weakness), low communion (i.e., their perceptions that social support is unavailable), and exploitativeness (i.e., their behaviour to take advantage of others for own benefit). Based on Study 1 findings, I hypothesised that narcissists' use of social support would be explained by different motivations/reasons -- and the effect would be different for grandiose, adaptive, maladaptive, and vulnerable components of narcissism.

In Study 1, I identified eight other coping styles, apart from social support, as a reaction to coping with different types of stress: Risky Ingestion (RI), Planful Problem Solving (PPS), Mental Escapism (ME), Downplaying (D), Anger/Aggression (A), Active

Escapism (AE), Considering Perspective (CP), and Looking for (spiritual) Help (LfH). Simple regressions provided evidence that grandiose narcissism was linked with higher risky ingestion, planful problem solving, downplaying, anger/aggression, active escapism, and looking for help. Adaptive and maladaptive narcissism were associated with six coping styles. However, the adaptive components explained the use of planful problem solving, and maladaptive components the use of risky ingestion, anger/aggression, and looking for help. Vulnerable narcissism was linked to increased use of risky ingestion and anger/aggression, and decreased use of planful problem solving. However, Study 1 did not incorporate mediators that can explain why narcissists use these coping styles. Study 2 does so. Based on previous literature, I tested self-enhancement, self-protection, impulsivity, optimism, and locus of control.

Previous research identified that grandiose narcissists are motivated to use strategies such as *self-enhancement* (SE; i.e., maximising positive self-views) and *self-protection* (SP; i.e., minimising negative self-views; Hepper, Gramzow, & Sedikides, 2010; for a broader review see Alicke & Sedikides, 2009). However, for vulnerable narcissists this might be different. No research to date has looked at this, however based on theoretical conceptualisations of vulnerable narcissism, it could be expected that they have less need for SE, but more need for SP. In turn, SE and SP have been linked to coping strategies. For example, SE is regarded a buffer against adversities in life (e.g., unemployment, illness, exposure to traumatic events), whereas SP can act as a damage control mechanism to avoid undesirable consequences related to the self (Bonanno, Field, Kovacevic, & Kaltman, 2002; Bonanno, Rennicke, & Dekel, 2005; Dufner, Gebauer, Sedikides, & Denissen, 2019). Therefore, I hypothesise that self-enhancement will be linked to more risky ingestion, planful problem solving, mental escapism, downplaying, anger/aggression, active escapism, considering perspective and looking for help. Self-protection will be linked to reduced use of risky ingestion, but increased used of planful

problem solving, mental escapism, downplaying, anger/aggression, active escapism, considering perspective, and looking for help.

In addition, both grandiose and vulnerable narcissists are relatively *impulsive* (Jones & Paulhus, 2011; Malesza & Kaczmarek, 2018; Miller et al., 2009; Vazire & Funder, 2006; Wink, 1991). In turn, impulsivity has been linked to maladaptive and self-destructive behaviours, risk taking (Cyders, 2013; Lightsey & Hulsey, 2002; Lynam & Miller, 2004), self-defeating behaviours (Miller et al., 2009), trait anger (Smits & Kuppens, 2005), problem solving and non-productive coping (Hasking, 2006). Thus, I tested whether different types of impulsivity mediated the relationship between narcissism and all identified coping strategies, apart from social support seeking.

Furthermore, internal control has been linked positively to active problem solving and expression of anger, and negatively to avoidance strategies, whereas external control has been linked positively to avoidance strategies and negatively to active problem solving and seeking social support (Brosschot, Gebhardt, Godaert, 1994). Grandiose narcissists tend to exploit others to achieve their own goals and maintain their self-perceived high social status (Morf & Rhodewalt, 2001). As such, they might believe they have *control* over their lives (i.e., high internal locus of control, less external control). However, vulnerable narcissists behave differently. They are more emotionally sensitive and insecure compared to grandiose narcissists. As a result, they may feel less in control over their lives (i.e., low internal control; higher external control). Thus, I hypothesise that both types of control would mediate between grandiose narcissism and social support, risky ingestion, planful problem solving, mental escapism, anger/aggression, active escapism, and looking for help.

Finally, grandiose narcissism is positively associated with *optimism* (Brown, Budzek, & Tamborski, 2009; Hickman, Watson, & Morris, 1996; Tamborski, Brown, & Chowning, 2012). However, due to a more avoidance-oriented approach, vulnerable

narcissists might be linked to less optimism and more pessimism (Wink, 1991). In turn, higher optimism correlates with active coping strategies and lower levels of avoidance / disengagement coping, whereas higher pessimism is associated with health-damaging behaviours (Carver, Scheier, & Segerstrom, 2010; Hatchett & Pratt, 2004). Therefore, I hypothesised optimism/pessimism to mediate between narcissism and planful problem solving, mental escapism, downplaying, anger/aggression, and active escapism.

3.1.2 Experience Sampling

To reduce the limitations of Study 1's between-subject design, I used an experience sampling method testing participants every three days. In Study 1, participants reported the most stressful event that happened to them in the last month, whilst being allocated to a specific condition (i.e., type of stressor: agentic, communal, or external). This might have contributed to biased perceptions of the events that happened; that is, participants might have been allocated to a condition that was not necessarily most stressful for them. In Study 2, I reduced the retrospectivity of the events from a month to only three days. Additionally, participants were free to write about any type of stressor they experienced within this timeframe. I set up a three part diary study with six time-points, four of which related to stressful situations. By doing this, I could explore within and between-subjects differences in dealing with stressful situations.

3.1.3 Narcissists' Well-Being

Experiencing any form of stressor can produce stress and have downstream consequences such as difficulty relaxing, feeling bad about one's self, feeling overwhelmed, feeling moody, and being more vulnerable to burn-out or developing depression and anxiety disorders (Cohen, Janicki-Deverts, & Miller, 2007; Hammen, 2005). Narcissists are prone to stress (Edelstein et al., 2010), but due to their high agentic drives (i.e., need for power) and lack of communion (i.e., lack of affiliation), they might use coping styles differently in reaction to stressors. Also narcissists report being

psychological healthy (i.e., high self-esteem and happiness, low depression and anxiety; Sedikides et al., 2004), but no research to date has looked at their well-being in the context of coping with stress. Furthermore, no research has focused on the different components of narcissism. Study 2 did so in an exploratory manner.

3.1.4 The Current Study

To summarise, using a repeated-measures design, this study aimed to (1) replicate mediation findings from Study 1, (2) identify additional mechanisms that underlie the use of other coping strategies apart from social support, (3) and identify the consequences of coping styles on well-being.

3.2 Method

3.2.1 Participants and Procedure

I recruited participants via several online platforms (e.g., www.callforparticipants.com, http://psych.hanover.edu/research/exponnet.html, onlinepsychresearch.co.uk, and socialpsychology.org), and via adverts placed on the University of Southampton Campus for a study called “Personality and Stress: How do You Cope?”.

This recruitment yielded 472 participants, and the 443 of them who provided a valid email-address were contacted for a follow-ups. Of those, 228 participants completed survey 2; 194 participants completed survey 3; 172 participants completed survey 4; 166 participants completed survey 5; and 185 participants completed the final survey.

Of the 443 participants who were contacted for follow-ups, 253 were excluded for not adhering to the inclusion criteria: they only provided some demographics / baseline data, failed to complete at least two of the four Part II surveys (with or without completion of Part III), were too young, or did not list their age. The final sample comprised 190 participants (153 women, 36 men, 1 unreported). Participants’ age ranged from 18 to 74 years (M_{age} = 29.44, SD_{age} = 10.81). They were residents of 33 different countries, mostly

the United Kingdom (*n* = 70), the United States (*n* = 51), the Netherlands (*n* = 11), and Canada (*n* = 10). Of the participants, 63.68% had English as a first language. The majority classified their ethnicity as White (78.42 %). The other ethnic backgrounds were Asian (3.68 %), Black (2.63 %), mixed (5.26 %), other (9.47 %), and unreported (0.53 %).

The highest degree of education that participants achieved was one or more years of college, no degree (13.68 %), a high school graduate – high school diploma or equivalent (12.63 %), Associate degree (12.63 %), Bachelor's degree (32.63 %), Master's degree (23.16 %), a Doctorate degree (3.16 %), or a professional degree (2.11 %). Most the participants were students (47.37 %) or employed full-time (25.79 %). The remaining were employed part-time (11.05 %), unemployed (7.89 %), home-makers (2.11 %), or otherwise employed (5.79 %).

3.2.1.1 Procedure

I set up this three-part diary study with six time points over a time-span of 15 days (i.e., a questionnaire every 3 days). Participants completed Part I (approx. 30 minutes), where they were asked some demographics questions, and some personality and well-being-questions.

For Part II, participants received an email with a link for a new survey every three days for a period of 12 days. Participants were asked to think about something stressful that happened to them during the previous three days and how they had dealt with this situation. Each of these surveys took approximately 10-15 minutes to complete. On the last day (15 days from baseline), participants received Part III where they were asked to answer the same well-being questionnaires as in Part I. This survey took about 5-10 minutes.

Participants were entered into a prize draw to win one of four £25 / $35 / €30 Amazon gift vouchers (in the currency of their choice). For each survey they completed, they received more tickets into the prize draw: For completing Part I they received 10 entries into the prize draw, for completing each of Part II they received 5 entries (up to 20),

and for completing Part III they could get a maximum of 30 entries into the prize draw, as all their previously earned entries would be doubled.

3.2.2 Materials

3.2.2.1 Part I

In Part I, participants answered questions about their demographics, personality, behaviours regarding social support seeking, impulsivity, self-enhancement, self-protection, optimism, locus of control, and well-being. Per subsection, I presented the questionnaires in a random order. Unless otherwise specified, I scored items on an 8-point rating scale, ranging from 1 (*not at all*) to 8 (*very much so*).

3.2.2.1.1 Personality questionnaires

3.2.2.1.1.1 Grandiose Narcissism

As per Study 1, I used the 40-item NPI (Raskin & Terry, 1988) to assess levels of grandiose, adaptive, and maladaptive narcissism. Grandiose narcissism scores ranged from 0 to 32 (M = 10.41, SD = 6.48, α = .85). Following Barry and colleagues (Barry et al., 2007; Barry & Malkin, 2010), and as in Study 1, I also computed scores for adaptive and maladaptive components of narcissism. Adaptive narcissism scores ranged from 0 to 13 (M = 4.43, SD = 3.03, α = .75), and maladaptive narcissism scores ranged from 0 to 15 (M = 3.74, SD = 2.99, α = .71). Consistent with past research (Barry et al., 2007; Hepper et al., 2014; Chapter 2), adaptive and maladaptive narcissism correlated positively, $r(190) = .53$, $p < .001$.

3.2.2.1.1.2 Vulnerable Narcissism

As in Study 1, I used the 10-item HSNS (Hendin & Cheek, 1997) to assess vulnerable narcissism. Average scores ranged from 1.60 to 7.70 (M = 4.45, SD = 1.22, α = .80). Consistent with past research, grandiose and vulnerable narcissism were uncorrelated, r (186) = -.11, p = .128.

3.2.2.1.2 Behavioural Questionnaires

After completing the personality questionnaires, participants were notified they were over one third of the way through the survey, and were instructed that the next set of questions contained questions regarding their thoughts and behaviours. All items were presented in a random order. Range, means and standard-deviations for questionnaires displayed below are in Table A3.1. For all scales higher scores mean greater agreement with these behaviours.

3.2.2.1.2.1 Behaviour Inhibition, Behaviour Approach, and Impulsivity

To measure impulsivity, I used the Behavioural Inhibition System (BIS) and the Behavioural Approach System (BAS; BIS/BAS scales; Carver, Meyer, & Antoni, 2000; Carver & White, 1994). The short version of the BIS/BAS contains three inhibition items (e.g., "I worry about making mistakes"; α = .71) and six approach items (e.g., "I crave excitement and new sensations"; α = .78). I also used another scale to measure Impulsivity, namely, four items assessing (negative) urgency from the UPPS-P Impulsive Behaviour Scale (Whiteside & Lynam, 2000). A sample item is "When I feel rejected, I will often say things that I later regret" (α = .83).

3.2.2.1.2.2 Self-Enhancement and Self-Protection

The Self-Enhancement and Self-Protection Strategies Scale–Short Form (SESP-SF; Hepper et al., 2010; Hepper, Sedikides, & Cai, 2013) assesses tendencies to engage in a variety of self-enhancement and self-protection behaviours. Participants reported the extent to which each behaviour was characteristic of them (1 = *not at all*, 8 = *very much*). Fifteen questions asked about the tendency to behave in a self-enhancing manner (e.g., "When you achieve success or really good grades, thinking it was due to your ability"; α = .83) and five questions asked about the tendency to behave self-protective (e.g., "When you do poorly at something or get bad grades, thinking it was due to bad luck"; α = .69).

3.2.2.1.2.3 Optimism

I used the 10-item Life Orientation Test – Revised version (LOT-R; Scheier, Carver & Bridges, 1994) to measure optimism (e.g., “In uncertain times, I usually expect the best”; α = .88).

3.2.2.1.2.4 Locus of Control

I measured Locus of Control (LoC) with a short version of Levenson’s LoC-scale (Levenson, 1974; Sapp & Harrod, 1993). It consists of a subscale focussing on Internal Control (three items; e.g., “My life is determined by my own actions”; α = .62) and External Control (six items; e.g., “I feel like what happens in my life is mostly determined by powerful people” and “When I get what I want, it’s usually because I’m lucky”; α = .80).

3.2.2.1.3 Social Support Questionnaires

After completing the behavioural questionnaires, participants completed questions about their relationships with other people in their life, and the support they receive from them. I presented all items in a random order to reduce order effects. Unless otherwise specified, items were scored on an 8-point rating scale, ranging from 1 (*not at all*) to 8 (*very much so*).

3.2.2.1.3.1 Perceived Availability of Social Support

I rephrased the 12-item Perceived Availability of Social Support-Scale (PASS; Hepper et al., 2011) to reflect disposition (e.g., “I can talk about my problems with my close others”). The PASS consists of 12 items about participants feelings towards the availability of social support in general (α = .92).

3.2.2.1.3.2 Perceptions of Social Support

I measured perceptions of social support using a shortened version of Study 1’s questionnaire (Hepper et al., 2011) comprising belief that social support-seeking is weak (3

items; α = .65), belief that social support can be used to manipulate and exploit others (3 items; α = .55), and belief that social support is natural and healthy (3 items; α = .78).

3.2.2.1.4 Well-Being Questionnaires

Next, participants responded to the final set of questions regarding their life and feelings over the last two weeks. To reduce order effects, I presented items in a random order. Unless otherwise specified, the response options ranged from 1 (*not at all*) to 8 (*very much so*).

3.2.2.1.4.1 Satisfaction with Life

I measured general satisfaction with life with the 5-item Satisfaction with Life Scale (SWLS; Diener et al., 1985). It asks how satisfied with their life participants were during the last 14 days (e.g., "in most ways my life was close to my ideal"; α = .89).

3.2.2.1.4.2 Psychological Well-being

I assessed well-being with the short version of the Scales of Psychological Well-Being (Ryff & Keyes, 1995). This 18-item scale refers to six life domains: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance (overall α = .87).

3.2.2.1.4.3 Depression, Anxiety, and Stress

I used the Depression, Anxiety, and Stress Scale (DASS-21; Crawford & Henry, 2003) to measure Depression (7 items; e.g., "I felt that I had nothing to look forward to"; α = .93), Anxiety (7 items; e.g., "I was worried about situations in which I might panic and make a fool of myself "; α = .83), and Stress (7 items; e.g., "I found it difficult to relax"; α = .90).

3.2.2.1.4.4 Emotional and Social Loneliness

I measured loneliness with the 10-item Emotional and Social Loneliness Scale (ESLS; Wittenberg & Reis, 1986). This scale identifies two types of loneliness: Emotional

(5 items; e.g., “I don’t have one specific relationship in which I feel understood”; α = .85), and Social (5 items; e.g., “Most everyone around me seems like a stranger”; α = .88).

3.2.2.1.5 Mood repair

Finally, participants completed a mood repair task whereby they listed three things that made them happy during the past two weeks. This was followed by a short debrief in which participants were thanked for taking part in Part I of the study, and were reminded of their entries into the prizedraw. Furthermore, they were reminded about the rest of the study.

3.2.2.2 Part II

After completing Part I, participants were invited every three days to provide their responses followed-up with a reminder one day later. Due to participants’ living in different time-zones, I sent out emails every day between 4PM and 5PM GMT+1 (or GMT, after daylight saving time ended in the UK), that is, at the end of the day in Western Europe or in the morning in the U.S.

During the Part II follow-ups (i.e., at three, six, nine, and 12 days after baseline), participants recalled a stressful situation that had happened to them during the last three days. In contrast to Study 1, participants were not required to recall a specific type of situation (e.g., agentic, communal, or external), but rather they were free to recall any stressful event that had occurred to them, and they were happy to share with us. After describing the stressful situation, participants answered questions regarding the situation. To minimise stress, the survey concluded with a mood repair task, where participants listed the most positive thing that happened to them in the last three days.

3.2.2.2.1 Stressful situation

During these four time points, participants recalled a stressful situation they had experienced during the past 3 days (since they filled out the previous survey), which they felt comfortable revealing to the researchers. It was highlighted to participants that it was

important that they recalled and share as much detail as possible about the stressful event, but within their comfort-zone of disclosure. It was also emphasised that all their responses were confidential. A definition of stressful was provided: “By ‘stressful’ we mean a situation that was difficult or troubling for you, either because you felt distressed about what happened, or because you had to use considerable effort to deal with the situation.”

3.2.2.2.2 Questions regarding specifics of the stressful situation

After writing a description of the stressful situation, participants answered questions about the stressful situation they had just described. The questions covered various aspects of the situation (e.g., single event/ongoing situation, when it was most stressful, which domain of life it relates most to, how many other people were actively/passively involved) in an effort to prompt participants toward covering the situation in detail.

3.2.2.2.3 Coping Styles

Finally, participants answered questions regarding how they coped with the stressful situation. They indicated the extent to which they used each coping-strategy during, or right after, the stressful situation they just described. I measured 36 coping strategies, which could be classified into 12 coping styles. These were shortened versions of Study 1’s coping styles. Four of them referred to seeking of social support, and eight to other coping styles.

As in Study 1, the questions on Seeking Social Support covered four types of social support, with three items each: emotional support (e.g., “I relied on others for comfort”), informational support (e.g., “I asked others for advice”), instrumental support (e.g., “I sought practical support from others”), and esteem support (e.g., “I turned to someone to remind me that I am a worthy person”).

The other eight coping-styles that were measured each time-point were: Risky Ingestion (e.g., “I found it difficult to stop eating once I had started”), Planful Problem

Solving (e.g., “I knew what had to be done, so I doubled my efforts to make things work”), Mental Escapism (e.g., “I had fantasies or wishes about how things might turn out”), Downplaying (e.g., “I accepted it, since nothing could be done”), Anger/Aggression (e.g., “I took it out on people around me”), Active Escapism (e.g., “I did some sport or exercise”), Considering Perspective (e.g., “I tried to see things form the other person’s point of view), and Looking for (spiritual) Help (e.g., “Focused on my Faith”; all alpha’s are depicted in Table 3.1), together with the intraclass correlation coefficients to see how the measures are related over time.

Table 3.1

Cronbach's Alpha's For All Coping Strategies Shown Per Timepoint, And The Intraclass Correlation Coefficient (ICC) For These Measures During The Four Timepoints

	Day 3	Day 6	Day 9	Day 12	ICC
Social Support	.93	.95	.90	.93	.69
Emotional Support	.89	.87	.85	.88	.69
Informational Support	.90	.91	.87	.91	.58
Instrumental Support	.78	.81	.76	.79	.57
Esteem Support	.86	.90	.86	.88	.74
Risky Ingestion	.61	.62	.64	.66	.80
Planful Problem Solving	.78	.73	.79	.81	.69
Mental Escapism	.57	.57	.51	.67	.66
Downplaying	.61	.70	.71	.62	.67
Anger/Aggression	.70	.72	.71	.73	.71
Active Escapism	.78	.66	.61	.59	.72
Considering Perspective	.52	.56	.66	.54	.57
Looking for (spiritual) Help	.61	.69	.75	.46	.86

3.2.2.3 Part III

I distributed the same well-being questionnaires as in baseline and computed reliability scores again for all of them in Part III. I measured satisfaction with Life (α = .90) with the SWLS (Diener et al., 1985), psychological well-being (α = .85) with the Scales of Psychological Well-Being (Ryff & Keyes, 1995), and Depression (α = .92), Anxiety (α = .88), as well as Stress (α = .87) with the DASS-21 (Crawford & Henry, 2003). Finally, I measured emotional loneliness (α = .87) and social loneliness (α = .88) with the ESLS (Wittenberg & Reis, 1986).

3.3 Results

3.3.1 Data preparation

I downloaded data for each day separately, removed duplicates, and merged datasets. Then I assigned participants a new identification number and deleted their email addresses to adhere with ethics.

Next, I excluded from further analyses participants who did not conform to inclusion criteria (see Paragraph 3.2.1), and checked key variables for normality of the data classifying items with Z-scores of +/- 3.29 as outliers (Field, 2013). Following a technique

by Tabachnick and Fidell (2013), I reduced the raw scores of outliers to be one unit above the next outlier in the data-set. If outliers were already one unit above the next outlier, I made them identical to that outlier. For skewness and kurtosis, I sued cut-off scores of +/-2 (Field, 2009). Grandiose narcissism, maladaptive narcissism, behavioural inhibition system, and the perception that asking for support is natural and healthy had issues with normality. I identified no other variables with problems regarding skewness and kurtosis.

3.3.2 Attrition Analyses

Excluded participants scored significantly higher on grandiose, adaptive, and maladaptive narcissism (M = 13.24, SD = 7.28; M = 5.84, SD = 3.39; and M = 4.84, SD = 3.22, respectively) than included participants (M = 10.39, SD = 6.50; M = 4.44, SD = 3.03; and M = 3.73, SD = 2.99, respectively), $t(387) = 4.05$, $p < .001$, $t(385.236) = 4.32$, $p < .001$, $t(387) = 3.54$, $p < .001$. Excluded and included participants did not differ in well-being measure at baseline.

3.3.3 Correlations

Grandiose narcissism was significantly positively correlated with the perception that seeking support is an opportunity to exploit others, the perceived availability of social support, behavioural approach, optimism, self-enhancement, self-protection, and internal locus of control; and negatively with behavioural inhibition, impulsivity, and external locus of control. Adaptive narcissism was significantly positively correlated with the perceived availability of social support, behavioural approach, optimism, self-protection, and internal locus of control; and negatively with behavioural inhibition, impulsivity, and external locus of control. Maladaptive narcissism was significantly positively correlated with the perception that seeking support is an opportunity to exploit and manipulate others, behavioural approach, optimism, self-enhancement, self-protection, and internal locus of control. Vulnerable narcissism was significantly positive correlated with the perceptions that seeking social support is a weakness, an opportunity to exploit, behavioural inhibition,

impulsivity, and external locus of control; and negatively with the perceptions that seeking support is healthy and available, optimism, and internal locus of control (see Table A3.1).

However, zero-order correlations cannot explain causality, and therefore they are not a necessity for inclusion into a mediation model (Hayes, 2018). Moreover, the components of narcissism (i.e., adaptive and maladaptive narcissism) might reveal unique associations when controlling for the effect of each other. Hence, I explored shared and unique variances of the proposed mediators.

3.3.4 Does Type of Narcissism Predict Use of Coping Strategies?

To test the hypothesis that narcissists use different coping strategies in times of stress, I ran simple regression models with each type of narcissism as predictors and all coping strategies as outcome variables (see Table 3.2). The models with adaptive and maladaptive narcissism control for the existence of the other subtype of narcissism. I computed mean scores for each coping strategy across the four daily surveys, and used this as outcome variable in my simple regression models.

The models explained up to 19.4% of the variance in use of coping strategies. However, most models were not significant (see Table 3.2). Looking at the averages of the coping strategies over the coping period, higher grandiose narcissism was related to higher planful problem solving, downplaying, and looking for help. When exploring the breakdown into adaptive and maladaptive components of narcissism, adaptive narcissism was associated with more use of planful problem solving, and less use of mental escapism, whereas maladaptive narcissism was associated with more use of mental escapism. In the model with looking for help as outcome variable, it was the shared variance of adaptive and maladaptive components of narcissism that had an effect, not the unique variances. Finally, vulnerable narcissism was linked to more use of risky ingestion, mental escapism, and anger/aggression.

Table 3.2
Simple Regressions Between Each Type of Narcissism as Predictor and Each Coping Strategy as Outcome Variable

	R^2	F [a]	*p*	B	β	*t*	*p*	95% CI of B	
								LL	UL
Social Support									
Grandiose Narcissism	0.01	2.04	0.155	0.91	0.10	1.43	0.155	-0.35	2.17
Adaptive Narcissism	0.00	0.34	0.712	0.22	0.03	0.39	0.698	-0.90	1.35
Maladaptive Narcissism	0.00	0.34	0.712	0.30	0.04	0.41	0.681	-1.15	1.76
Vulnerable Narcissism	0.01	2.48	0.117	-0.14	-0.12	-1.58	0.117	-0.31	0.03
Risky Ingestion									
Grandiose Narcissism	0.00	0.00	0.988	0.01	0.00	0.02	0.988	-1.06	1.08
Adaptive Narcissism	0.02	2.17	0.117	-0.81	-0.14	-1.69	0.093	-1.75	0.14
Maladaptive Narcissism	0.02	2.17	0.117	1.20	0.17	1.93	0.055	-0.03	2.42
Vulnerable Narcissism	**0.05**	**9.49**	**0.002**	**0.22**	**0.22**	**3.08**	**0.002**	**0.08**	**0.36**
Planful Problem Solving									
Grandiose Narcissism	**0.02**	**4.26**	**0.040**	**1.36**	**0.15**	**2.06**	**0.040**	**0.06**	**2.67**
Adaptive Narcissism	**0.05**	**4.44**	**0.013**	**1.65**	**0.24**	**2.84**	**0.005**	**0.51**	**2.80**
Maladaptive Narcissism	**0.05**	**4.44**	**0.013**	-0.57	-0.06	-0.76	0.450	-2.06	0.92
Vulnerable Narcissism	**0.04**	**8.23**	**0.005**	**-0.25**	**-0.21**	**-2.87**	**0.005**	**-0.43**	**-0.08**
Mental Escapism									
Grandiose Narcissism	0.02	3.63	0.058	-1.16	-0.14	-1.91	0.058	-2.37	0.04
Adaptive Narcissism	**0.09**	**9.51**	**< .001**	**-2.28**	**-0.36**	**-4.36**	**< .001**	**-3.31**	**-1.25**
Maladaptive Narcissism	**0.09**	**9.51**	**< .001**	**1.53**	**0.19**	**2.26**	**0.025**	**0.20**	**2.87**
Vulnerable Narcissism	**0.19**	**44.40**	**< .001**	**0.50**	**0.44**	**6.66**	**< .001**	**0.35**	**0.65**
Downplaying									
Grandiose Narcissism	**0.03**	**4.79**	**0.030**	**1.24**	**0.16**	**2.19**	**0.030**	**0.12**	**2.35**
Adaptive Narcissism	0.03	2.64	0.074	0.80	0.14	0.11	-0.189	1.79	1.79
Maladaptive Narcissism	0.03	2.64	0.074	0.36	0.05	0.56	0.580	-0.92	1.65
Vulnerable Narcissism	0.01	1.83	0.177	-0.11	-0.10	-1.35	0.177	-0.26	0.05
Anger/Aggression									
Grandiose Narcissism	0.00	0.09	0.762	0.17	0.02	0.30	0.762	-0.93	1.26
Adaptive Narcissism	0.01	1.29	0.277	-0.57	-0.10	-1.16	0.246	-1.54	0.40
Maladaptive Narcissism	0.01	1.29	0.277	0.99	0.13	1.56	0.121	-0.26	2.24
Vulnerable Narcissism	**0.04**	**8.15**	**0.005**	**0.21**	**0.21**	**2.85**	**0.005**	**0.07**	**0.36**
Active Escapism									
Grandiose Narcissism	0.01	2.73	0.100	0.99	0.12	1.65	0.100	-0.19	2.17
Adaptive Narcissism	0.03	2.72	0.068	1.23	0.20	2.32	**0.021**	0.19	2.27
Maladaptive Narcissism	0.03	2.72	0.068	-0.72	-0.09	-1.05	0.296	-2.07	0.63
Vulnerable Narcissism	0.02	3.41	0.067	-0.15	-0.14	-1.85	0.067	-0.31	0.01
Considering Perspective									
Grandiose Narcissism	0.02	3.34	0.069	1.06	0.13	1.83	0.069	-0.08	2.20
Adaptive Narcissism	0.01	0.98	0.379	0.42	0.07	0.82	0.414	-0.60	1.44
Maladaptive Narcissism	0.01	0.98	0.379	0.35	0.05	0.53	0.599	-0.97	1.67
Vulnerable Narcissism	0.00	0.67	0.416	-0.06	-0.06	-0.82	0.416	-0.22	0.09
Looking for (spiritual) Help									
Grandiose Narcissism	**0.04**	**8.59**	**0.004**	**1.60**	**0.21**	**2.93**	**0.004**	**0.52**	**2.67**
Adaptive Narcissism	**0.03**	**3.26**	**0.041**	0.79	0.14	1.63	0.106	-0.17	1.75
Maladaptive Narcissism	**0.03**	**3.26**	**0.041**	0.55	0.07	0.81	0.420	-0.74	1.76
Vulnerable Narcissism	0.02	3.56	0.061	-0.14	-0.14	-1.89	0.061	-0.28	0.01

Note: models were run separately for each type of narcissism, but each of adaptive and maladaptive narcissism were controlled for when examining the effect of the other;
[a] degrees of freedom for grandiose narcissism: 1, 188; for adaptive and maladaptive narcissism: 2, 187; for vulnerable narcissism: 1, 184.

3.3.5 Analytic Techniques to Test Relations Between Narcissism and Coping Strategies Via Different Mediators

Statistical mediation analyses help to identify the links between predictor variables and outcome variables via one or more mediating variables. In most cases, mediation-analyses are computed on a single level (i.e., either between-subjects, or within-subjects). When datasets contain both between- and within-subject data simultaneously, multilevel models can be used. Typically, when dealing with multilevel data, the data of the lower level (e.g., students achievement) are nested in the higher level (e.g., class; Heck, Thomas, & Tabata, 2010; Tabachnick & Fidell, 2013). When dealing with data of a longitudinal, repeated measures design, data become nested in time-periods. In this study, I depict the repeated measures as Level 1 (within-subjects data, time varying), and the different research participants as Level 2 (between-subjects data, time invariant).

A specific application of multilevel models is multilevel mediation. Depending on the type of data collected, data for the predictor, mediator, outcome variable, or a combination of these will be within-subjects. In the current study, I used upper level (2-2-1) mediation models, with type of narcissism as predictor, different attitudes/motives as mediators, and coping strategies as outcome (see Figure 3.1). In an upper-level mediation models, the predictor variable and mediator variable(s) are measured on a higher level (i.e., Level 2; at the person level), whereas the outcome variable is measured on a lower level (i.e., Level 1; repeated measures). I estimated all parameters and corresponding confidence intervals using the Monte Carlo Method (Bauer, Preacher, & Gil, 2006; Preacher & Selig, 2012; Preacher, Zyphur, & Zhang, 2010). If a confidence interval does not encompass zero, it means there is a significant effect.

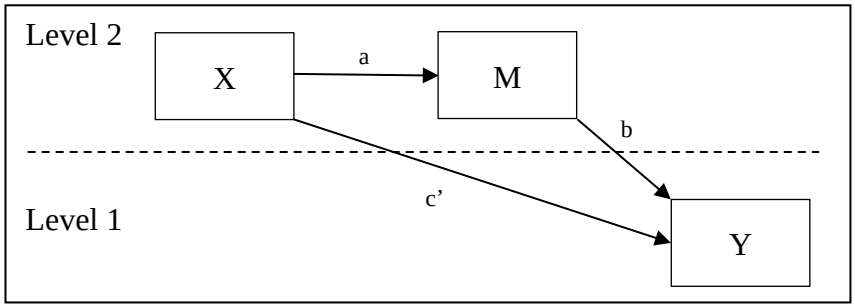


Figure 3.1 Upper level mediation (adapted from Bauer, Preacher, & Gil, 2006)

In this study, the outcome variables were time varying (i.e., I have repeated measures of each coping strategy), whereas the predictor variable (i.e., narcissism) and mediator variables (i.e., the motivations to use each a coping strategy) were time-invariant (i.e., I collected one measurement for each participant). Because of these differences between time-variant, and time-invariant variables, there were no total effects depicted, but only direct effect and indirect effects. In all mediation models, I distinguish between overall grandiose narcissism, adaptive, maladaptive, and vulnerable narcissism, and included only theoretically relevant mediators for each outcome variable. This led to 36 upper-level mediation models.

I ran the upper-level-mediation models using Mplus Version 7.4 Base Program and Combination Add-On (Muthen & Muthen, 2015). I took a Multilevel Structural Equation Model (MSEM) approach over a 'normal' Multilevel Modelling (MLM) approach, because MSEM is a more flexible and precise tool for evaluating multilevel models than MLM (Card, 2011; Preacher et al., 2010; Preacher et al., 2011).

3.3.6 Results of Upper Level Mediation Models

I depict below results of these upper level mediation models. Firstly, I describe model summaries of all models, followed by an explanation of significant direct effects from predictor to mediator and mediator to outcome variable in the models. Finally, I describe indirect effects for each model. Due to the complexity of the models, I depict only

significant results in the text. For full details of each of the models, including non-significant effects, see Table A3.2 to Table A3.10.

3.3.6.1 Model Summary of All Models

All tested models were significant. For grandiose narcissism as the predictor, the models explained between 14.5 and 27.5% of the variance in use of specific coping strategies. For adaptive and maladaptive narcissism as predictors, the models explained between 15.4% and 41.0% of the variance. For vulnerable narcissism, the models explained between 16.0% and 39.9% of the variance (see Table 3.3). For most outcome variables there were minimal differences in explained variance between the different predictors, meaning each type of narcissism is similar in predicting the amount of usage of each coping strategy. However, in the model explaining use of mental escapism, grandiose narcissism did not explain as much variance (27.5%) compared to adaptive and maladaptive narcissism (31.0%) or vulnerable narcissism (39.9%), meaning that looking only at grandiose narcissism was associated with loss of information compared to adaptive and maladaptive narcissism.

Table 3.3
Model Variances in the Models

		SS	RI	PPS	ME	D	A	AE	CP	LfH
GN	R^2	.227	.150	.211	.275	.206	.185	.145	.191	.162
	p	.003	.010	.004	<.001	.016	.002	.032	.021	.008
AN/MN	R^2	.221	.201	.229	.410	.182	.222	.179	.188	.154
	p	.003	.006	.004	<.001	.022	.002	.018	.020	.010
VN	R^2	.218	.176	.234	.399	.160	.218	.162	.172	.162
	p	.003	.005	.005	<.001	.025	.001	.032	.023	.014

Note: GN=Grandiose Narcissism, AN/MN=Models with Adaptive or Maladaptive Narcissism, whilst controlling for each other, VN=Vulnerable Narcissism, RI = Risky Ingestion, PPS = Planful Problem Solving, ME = Mental Escapism, D=Downplaying, A=Anger/Aggression, AE=Active Escapism, CP=Considering Perspective, LfH=Looking for (spiritual) Help.

Another measure of the model summary was the within level 1 variance of the outcome variables in each model (see Table 3.4). In all models, this within level variance was significant, suggesting that use of each coping strategies was unstable over time.

Table 3.4

Within Level Variances in All Models

		SS	RI	PPS	ME	D	A	AE	CP	LfH
GN	***Estimate***	2.04	1.05	2.79	2.31	2.11	1.71	2.03	2.45	0.84
	p	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
AN/MN	***Estimate***	2.04	1.05	2.79	2.31	2.11	1.71	2.04	2.45	0.84
	p	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
VN	***Estimate***	2.04	1.05	2.79	2.31	2.11	1.71	2.03	2.45	0.84
	p	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001

Note: GN = Grandiose Narcissism, AN/MN = Models with Adaptive or Maladaptive Narcissism, whilst controlling for each other, VN = Vulnerable Narcissism, RI = Risky Ingestion, PPS = Planful Problem Solving, ME = Mental Escapism, D = Downplaying, A = Anger/Aggression, AE=Active Escapism, CP = Considering Perspective, LfH = Looking for (spiritual) Help.

3.3.6.2 Direct Effects

Table 3.5 shows all the direct effects between each type of narcissism and all mediators. As hypothesised, higher grandiose narcissism was associated positively with perceiving social support as available and as an opportunity to exploit others, and with behavioural approach, self-enhancement, self-protection, optimism, and internal locus of control. Furthermore, as hypothesised, grandiose narcissism was associated negatively with motivation to move away from something undesired (BIS), (negative) urgency, and unexpectedly, external locus of control.

Furthermore, higher adaptive narcissism was associated with lower likeliness to perceive asking for support as a weakness, less behavioural inhibition, and less external locus of control. However, higher adaptive narcissists reported higher perceived availability of social support, higher self-enhancement, higher levels of optimism, and a higher internal locus of control.

As hypothesised, higher maladaptive narcissists were more likely to perceive asking for support as a weakness and as an opportunity to exploit others, were more impulsive, engaged in more self-enhancement and self-protection, and were more likely to indicate behavioural inhibition.

Finally, higher vulnerable narcissists were more likely to perceive asking for support as a weakness, indicate behavioural inhibition, and be more impulsive and self-protective. However, higher vulnerable narcissism was linked to lower belief that asking for support is natural, healthy, or available, lower self-enhancement, lower optimism, and lower internal locus of control. The finding that higher vulnerable narcissism was related to more self-protection was significant in some of the models, and marginally significant in others.

Table 3.5
Displaying Direct Effects Between Different Types Of Narcissism, and All Mediators

	Weak	Exploit	Health	PASS	BIS	BAS	I	SE	SP	O	EC	IC
GN	x	+	x	+	-	+	-	+	+	+	-	+
AN	-	-°	x	+	-	x	-	+	x	+	-	+
MN	+	+	x	x	+°	+	+	+	+	x	+	x
VN	+	+	-	-	+	x	+	-	+#	-	+	-

Note: GN=Grandiose Narcissism; AN=Adaptive Narcissism; MN= Maladaptive Narcissism; VN=Vulnerable Narcissism; Weakness = perception that asking support is a weakness; Exploit = perception that asking for support is an opportunity to manipulate and exploit; Health = perception that asking support is natural and healthy; PASS = Perceived Availability of Social Support; BIS = Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SE = Self-Enhancement; SP = Self-Protection; O = Optimism; EC = External Locus of Control; IC = Internal Locus of Control.
- = negative effect; + = positive effect; x = were non-significant effects; ° = only marginally significant; # = only marginally significant in RI, PPS, LfH

I depict the direct effects between the mediators and each of the outcome variables in Table 3.6. The perceptions that asking for support is a weakness, an opportunity to exploit, or natural and healthy, and behavioural approach, and locus of control were not significant predictors of any coping style, whereas all other potential mediators have some effects on use of coping styles. Therefore, most of the identified mediating variables have the potential to explain narcissistic differences in coping.

In all models, there was only one coping style with significant direct effect from a type of narcissism: adaptive narcissism was a negative predictor of use of mental escapism, whereas vulnerable narcissism was a positive predictor of use of mental escapism.

Table 3.6
Direct Effects Between All Mediators and All Coping Strategies

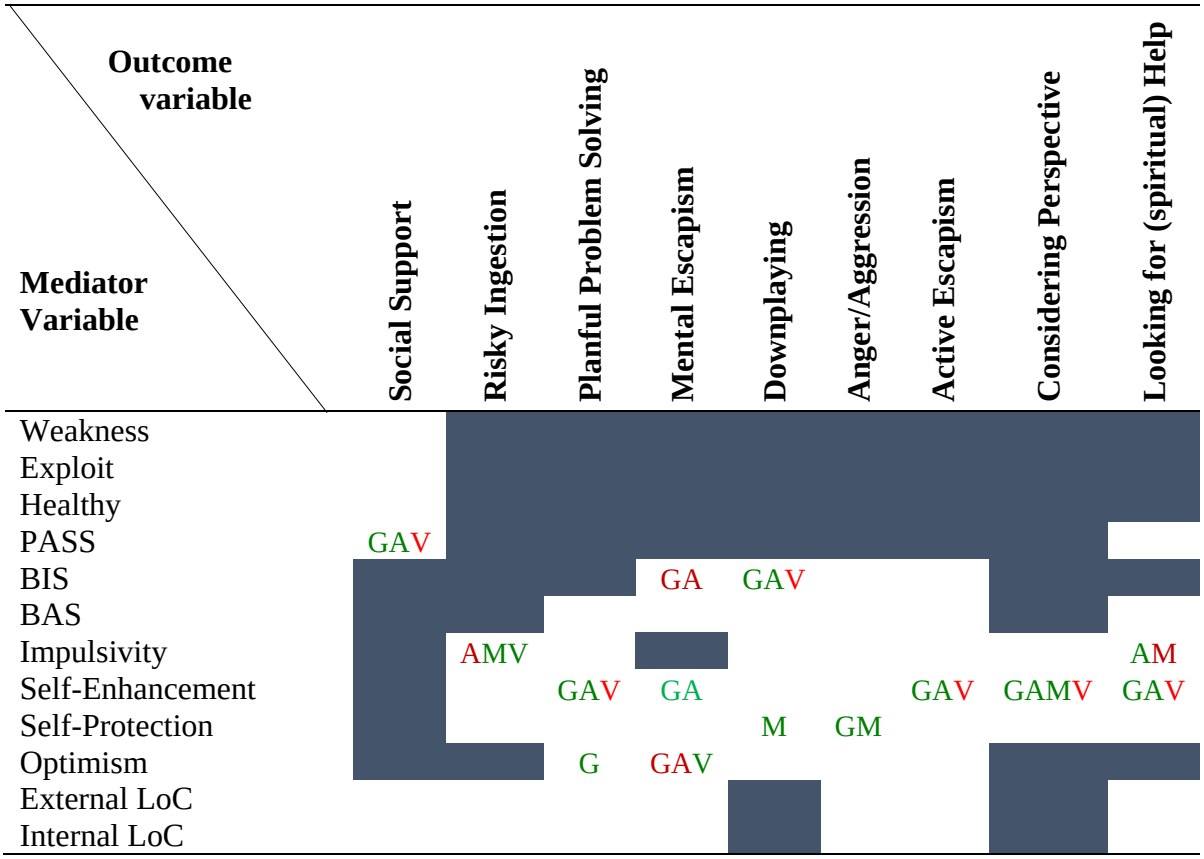
	SS	RI	PPS	ME	D	A	AE	CP	LfH
Weak	x								
Exploit	x								
Health	x								
PASS	+								x
BIS				+˜	-	x	x		
BAS			x	x	x	x	x		x
I		+	x		x	+°	x	x	-˜
SE		x	+	+ ^	x	x	+	+	+
SP		+	x	x	+	+	x	x	x
O			x	-	x				
EC	x	x	x	x		x	x		
IC	x	x	x	x		x	x		

Note: GN=Grandiose Narcissism; AN=Adaptive Narcissism; MN= Maladaptive Narcissism; VN=Vulnerable Narcissism; Weakness = perception that asking support is a weakness; Exploit = perception that asking for support is an opportunity to manipulate and exploit; Health = perception that asking support is natural and healthy; PASS = Perceived Availability of Social Support; BIS = Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SE = Self-Enhancement; SP = Self-Protection; O = Optimism; EC = External Locus of Control; IC = Internal Locus of Control; SS = Social Support; RI = Risky Ingestion; PPS = Planful Problem Solving; ME = Mental Escapism; D = Downplaying; A = Anger/Aggression; AE = Active Escapism; CP = Considering Perspective; LfH = Looking for (spiritual) Help;
- = negative effect; + = positive effect; x = were non-significant effects; ° = only marginally significant; ˜ = only significant in GN, AN, MN; ^ = significant for GN, AN, MN, but only marginally for VN; grey boxes is no direct effects.

3.3.6.3 Indirect Effects

Table 3.7

Indirect Effects via Each Mediator On The Use Of Coping Styles



Note: capital letters depict significant results within the models with **G**randiose, **A**daptive, **M**aladaptive, or **V**ulnerable narcissism as predictor. The color displays the direction of this indirect effect (green = positive, red = negative); Weakness = perception that asking support is a weakness; Exploit = perception that asking for support is an opportunity to manipulate and exploit; Health = perception that asking support is natural and healthy; PASS = Perceived Availability of Social Support; BIS = Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SE = Self-Enhancement; SP = Self-Protection; O = Optimism; EC = External Locus of Control; IC = Internal Locus of Control.

3.3.6.3.1 Social Support

I conducted an upper level mediation analysis to explore the relation between narcissism and use of social support via six potential mediators (see Appendix A: Table A3.2). Four of these were the same as in Study 1: Perceived *availability* of social support, the perceptions that seeking support was perceived as a *weakness*, an opportunity to manipulate and *exploit* others, and was natural and *healthy*. I added perceived *external* locus of control and perceived *internal* locus of control.

The multilevel mediation analyses revealed significant positive indirect effects for grandiose and adaptive narcissism towards using social support via the perceived availability of social support; that is, increase in narcissism was linked to more perceived availability of social support, which contributed to higher support seeking. For maladaptive narcissism, there were no significant indirect effect via any of the mediators. Finally, for vulnerable narcissism, there was only a significant negative indirect effect via the perceived availability of social support (explained by the finding that an increase in vulnerable narcissism was linked to decrease in the perceived availability of social support). These findings are inconsistent with the hypotheses that grandiose, maladaptive, and vulnerable narcissists use more social support by perceiving an opportunity to exploit others.

3.3.6.3.2 Risky Ingestion

The multilevel mediation model testing the effect of each type of narcissism on use of risky ingestion (i.e., overeating or drinking, drugs abuse) as a coping style explored whether the tendencies to act impulsive, self-enhance, self-protect, and the perceived internal or external locus of control would influence use of risky ingestion (see Table A3.3).

There were no significant indirect effects via grandiose narcissism on use of risky ingestion. However, the breakdown into adaptive and maladaptive narcissism produced some significant indirect effects. In the model with adaptive narcissism as predictor, there was a negative indirect effect via impulsivity (explained by narcissism being linked with less impulsivity), whereas in the model with maladaptive narcissism there were significant positive indirect effect via impulsivity. Finally, for vulnerable narcissists, there was a significant positive indirect effect via impulsivity.

3.3.6.3.3 Planful Problem Solving

The multilevel mediation model testing the effect of each type of narcissism on use of planful problem solving (i.e., trying to find solutions) as a coping strategy tested whether behavioural approach, impulsivity, self-enhancement, self-perception, optimism, internal locus of control, and external locus of control would influence use of planful problem solving (Table A3.4).

For grandiose and adaptive narcissism, there were significant positive indirect effects via the need to self-enhance, and level of optimism: higher grandiose and adaptive narcissism was associated with an increase in self-enhancement and optimism, which in turn was associated with an increase in planful problem solving. For maladaptive narcissism, there were no significant indirect effects, whereas, for vulnerable narcissism, the indirect effect via self-enhancement was significant and negative: higher vulnerable was associated with a decrease in self-enhancement, which in turn was linked to a decrease in planful problem solving.

3.3.6.3.4 Mental Escapism

I tested the effect of each type of narcissism on use of mental escapism (i.e., had fantasies about how things might turn out) in times of stress via behavioural inhibition, behavioural approach, impulsivity, self-enhancement, self-protection, and optimism, and external/internal control (see Table A3.5).

In the models with grandiose and adaptive narcissism as predictors, there were significant negative indirect effects via behavioural inhibition (explained by narcissism being linked to lower inhibition), and optimism (explained by narcissism being linked to higher optimism, but optimism to lower mental escapism). There were also significant positive indirect effects from grandiose and adaptive narcissism via the tendency to self-enhance. In the model with maladaptive narcissism as predictor, there were no significant indirect effects, whereas, in the model with vulnerable narcissism as predictor, there was a

significant positive indirect effect via level of optimism: higher vulnerable narcissism was related to lower optimism, which in turn was linked to more use of mental escapism.

3.3.6.3.5 Downplaying

I tested the effects of each type of narcissism on use of downplaying (i.e., went on as if nothing happened) in times of stress via behavioural inhibition, behavioural approach, impulsivity, self-enhancement, self-protection, and optimism (see Table A3.6).

In the models with grandiose and adaptive narcissism as predictors, there were significant positive indirect effects via behavioural inhibition: these types of narcissism were linked to lower inhibition, and lower inhibition to more downplaying. In the model with vulnerable narcissism as predictor, there was a significant negative indirect effect via behavioural inhibition: higher narcissism was linked to higher inhibition, but higher inhibition was associated with lower use of downplaying. The model with maladaptive narcissism as predictor had a significant positive indirect effect via the tendency to self-protect: an increase in narcissism was linked to more self-protection, which in turn was related to more use of downplaying.

3.3.6.3.6 Anger/Aggression

Table A3.7 shows the effects of each type of narcissism on the use of anger/aggression (i.e., took it out on other people) in times of stress via behavioural inhibition, behavioural approach, impulsivity, self-enhancement, self-protection, and locus of control (both internal and external). For grandiose and maladaptive narcissism, there was a significant positive indirect effect via the tendency to self-protect. Finally, in the models with adaptive and vulnerable narcissism as predictors, there were no significant indirect effects.

3.3.6.3.7 Active Escapism

I tested the effects of grandiose, adaptive, maladaptive and vulnerable narcissism on the use of active escapism (i.e., did some sport or exercise) in times of stress via

behavioural inhibition, behavioural approach, impulsivity, self-enhancement, self-protection, and internal and external locus of control (see Table A3.8).

In the models with grandiose and adaptive narcissism as predictors, I found significant positive indirect effects via the tendency to self-enhance. In the model with maladaptive narcissism as predictor, there were no significant indirect effects, whereas, in the model with vulnerable narcissism as predictor, there was a significant negative indirect effect via the tendency to self- enhance; here, vulnerable narcissism was linked to a decrease in self-enhancement, whereas an increase in self-enhancement was linked to higher active escapism.

3.3.6.3.8 Considering Perspective

Testing the effect of narcissism on the use of considering perspective (i.e., trying to see it from other people's perspectives) in times of stress was done via impulsivity, self-enhancement, and self-protection (see Table A3.9).

In the models with grandiose, adaptive, and maladaptive narcissism as predictors, I found a significant positive indirect effect to use considering perspective, via the tendency to self- enhance. However, I found that vulnerable narcissism had a significant negative indirect effect via the tendency to self-enhance on use of considering perspective. Again, this negative indirect effect was explained by higher vulnerable narcissism being linked to lower self-enhancement.

3.3.6.3.9 Looking for (Spiritual) Help

I tested the effects of narcissism on use of looking for help (i.e., getting professional help, or praying) in times of stress via the perceived availability of support, behavioural inhibition, impulsivity, self-enhancement, self-protection, and internal and external locus of control (see Table A3.10).

There was a significant positive indirect effect to use looking for help from grandiose narcissism via the tendency to self-enhance: an increase in narcissism was linked

to an in increase in self-enhancement, which in turn contributed to an increase in looking for help. In the model with adaptive narcissism, significant positive indirect effects emerged via the tendencies to act impulsively (i.e., adaptive narcissism was linked to lower impulsivity, which in turn conduced to more looking for help) and to self-enhance (i.e., an increase in narcissism was linked to an in increase in self-enhancement, which in turn conduced a rise in looking for help). Whereas, there was a significant negative indirect effect via impulsivity from maladaptive narcissism to use looking for help (i.e., higher narcissism was associated with to higher impulsivity, which in turn was associated with to lower looking for help). Finally, in the model with vulnerable narcissism as a predictor, there was a significant negative indirect effect via self-enhancement. Again this negative indirect effect was explained by higher vulnerable narcissism conducing to lower self-enhancement.

3.3.7 Analytic Techniques to Test the Relations Between Narcissism and Well-Being Via Different Coping Styles

To test the hypothesis that change in wellbeing depends on the coping styles employed, I conducted lower level, 2-1-2 mediation models (Preacher & Selig, 2012; Preacher et al., 2010). Here, the mediator is measured on repeated occasions, but the predictor and outcome variable are measured at one time point only.

The mediators (i.e., the coping styles) were time varying (i.e., measured repeatedly). However, the predictor variable (i.e., narcissism), and outcome variables (i.e., change in well-being) were time-invariant (i.e., measured only once). In all mediation models, I distinguish between overall grandiose narcissism, adaptive, maladaptive, and vulnerable narcissism, leading to four 2-1-2 mediation models per outcome variable. I used Mplus Version 7.4 Base Program and Combination Add-On (Muthen & Muthen, 2015) for analyses.

I used paired samples t-tests to test whether there were significant differences between baseline measures of well-being (Part I), and measures of well-being on the final day (Part III). Table A3.11 displays the results of these paired samples t-test. There was only one significant change in well-being for depression between these two time points, $t(150) = -2.49$, $p = .014$, meaning it was lower at Time 2 than Time 1. No other well-being measures showed significant differences between Part I and Part III. Therefore, I only display the outcome of a mediation model with change in depression as outcome variable below. Appendix C outlines the results of the mediation models with the other well-being measures (i.e., psychological well-being, satisfaction with life, anxiety, social loneliness, and emotional loneliness) as outcome variables. In all models I used difference score because controlling for baseline levels of depression is likely to over-inflate statistical tests.

3.3.7.1 Depression

The tested model explaining *change in depression* used all subtypes of narcissism as predictor variables and all coping styles as mediators. The model with grandiose narcissism as predictor explained 14.3% of the variance, but was not significant, $p = .107$ (Table A3.12, left panel).

I turned to the breakdown of grandiose narcissism into adaptive and maladaptive components. These models significantly explain respectively 23.3% and 21.7% of the variance in change in depression (Table A3.12, middle panel). In the model with adaptive narcissism as predictor, there were no significant direct effect from adaptive narcissism towards change in depression, but there was a significant negative direct effect from maladaptive narcissism towards change in depression. In the model with maladaptive narcissism as predictor, these values were slightly different: there was a significant negative direct effect from maladaptive narcissism to change in depression, and a significant positive effect from adaptive narcissism to change in depression.

I next examined other direct paths within these models. Adaptive narcissism predicted more use of planful problem solving, downplaying, and looking for help, and less use of mental escapism. No significant paths emerged between any of the coping styles and change in depression. For maladaptive narcissism, there were no significant direct effects on the use of different coping styles, and only use of anger/aggression as coping style was linked to greater *change in depression*, meaning participants became less depressed over time. These two models, with adaptive and maladaptive narcissism as predictors, did not have any significant indirect effects via coping styles towards change in depression.

The model with vulnerable narcissism as predictor of change in depression explained 14.5% of the variance, but was not significant (p = .081; Table A3.12, right panel). In this model there were no significant direct effects of vulnerable narcissism to change in depression. When testing the direct paths in these models, I found that vulnerable narcissism conduced to greater use of risky ingestion, mental escapism, and use of anger/aggression. Additionally, vulnerable narcissism conduced to less use of planful problem solving, and looking for (spiritual) help. Furthermore, only downplaying contributed to higher change in depression (i.e., participants became less depressed over time). In this model there were no significant indirect effects from vulnerable narcissism towards change in depression via any of the coping styles.

3.4 Discussion

Study 2 aimed to replicate and extend Study 1 findings. Specifically, it aimed to (1) find more evidence for direct effects between level of narcissism and narcissists' motivations for using social support in times of stress, using an experience sampling methodology; (2) examine motivations that could explain use of other coping styles in times of stress; and (3) test whether narcissists' psychological well-being changes over time as a result of their coping with stressful situations.

3.4.1 Narcissism and Social Support

Contrasting to Study 1, I found no significant links between narcissism and use of social support in times of stress. However, when examining the motivations as to why narcissists used social support, I found similarities between the two studies. In both studies, I obtained direct effects between types of narcissism and perceptions about using social support. Across studies, I found that grandiose, maladaptive, and vulnerable narcissism was positively associated with the perception that using support is an opportunity to exploit and manipulate others. This is in line with the three-dimensional model of narcissism that antagonistic aspects (i.e., self-importance and entitlement), overlap with grandiose, maladaptive, and vulnerable narcissism. Furthermore, across both studies, I found that high adaptive narcissism was negatively associated with the perception that asking for support is a weakness, and positively with the perceived availability of social support, whereas for vulnerable narcissism these associations were the opposite way around. This is also in line with the theoretical conceptualisation that adaptive and vulnerable narcissism are conceptually different in both a two-and a three dimensional conceptualisation of narcissism (e.g., Back & Morf, 2017; Krizan & Herlache, 2018; Miller et al., 2016; Morf & Rhodewalt, 2001; Weiss, et al., 2019). Furthermore, these findings are in line with vulnerable narcissists' avoidance orientation (e.g., Krizan & Herlache, 2018), I found that vulnerable narcissism was linked with lower perceived availability of social support, however, there were some minor discrepancies between the two studies. In contrast to Study 1, in Study 2, I did not find evidence for a positive association between adaptive narcissism and the perception that asking for support is natural and healthy or between maladaptive narcissism and the perception that asking for support is a weakness. Furthermore, I found no evidence for the negative associations between maladaptive narcissism and perceived availability of support. Instead, I found evidence for a positive association between vulnerable narcissism and the perception that asking for support is healthy; and grandiose narcissism and the

perception that support is available.

Similar to Study 1, I found no evidence that perceiving support as a weakness was associated with actual use of social support but perceiving support as available was associated with use of social support. However, in contrast to Study 1, I did not find evidence for direct effects between perceiving social support as an opportunity to exploit others, or as natural and healthy, and use of social support. These differences in direct effects could potentially be explained by methodological differences between the two studies. In Study 1, I used situational phrasing of mediators, whereas in Study 2, I used dispositional phrasing. Further research is needed to disentangle the relationship between different subtypes of narcissism, perceptions of using social support, and actual use of social support.

Differences in significant direct associations between motivations to use support, and actual use of support, meant that, in Study 2, I only obtained evidence of indirect effects of narcissism (grandiose, adaptive, and vulnerable) via perceived availability of social support. For grandiose and adaptive narcissism, this indirect effect was positive, but, for vulnerable narcissists, it was negative. This discrepancy results from the direct effect found for these types of narcissism towards the perceived availability of social support. For grandiose and adaptive narcissism this was positive, whereas, for vulnerable narcissism, it was negative. These differences support previous findings of distinct types of narcissism (i.e., grandiose, adaptive, maladaptive, vulnerable) as explained by a two-factor as well as a three-factor model of narcissism, each with their own underlying motivations (e.g., Back & Morf, 2017; Barry & Malkin, 2007; Cai & Luo, 2018; Krizan & Herlache, 2018;Weiss & Miller, 2018).

3.4.2 Narcissism and Other Coping Styles

In an extension of Study 1, I tested several motivations as mediators to explain different coping styles used by narcissists. These results were mixed. I found direct effects

from types of narcissism to most mediators, but there was not always evidence for a direct effect from the mediators to the different coping styles (see Table 3.6). Furthermore, regarding the indirect effects, there were no indirect effects via internal or external locus of control, or behavioural approach to any of the outcome variables (see Table 3.7). Locus of control did not influence use of coping styles. These similarities and differences in direct effects between subtypes of narcissism and mediators; as well as indirect effects from narcissism on use of coping style via these mediators, highlights the (conceptual and empirical) differences between grandiose, adaptive, maladaptive, and vulnerable narcissism (see Figure 1.1, page 15). When only looking at the direction of significant associations (i.e., positive or negative), adaptive narcissists are very similar to grandiose narcissists in their motivations (see Table 3.5), and use of coping styles (see Table 3.7), but differ compared with vulnerable narcissism. This is in agreement with the conceptualisation that adaptive and vulnerable narcissism do not overlap with one another. Furthermore, these associations show that maladaptive narcissism can be similar to grandiose (and adaptive) narcissism, and/or vulnerable narcissism. This corresponds with the conceptualisations within the Narcissism Spectrum Model that explains that antagonistic aspects of narcissism (i.e., self-importance/entitlement) can influence both agentic aspects (i.e., grandiose/adaptive narcissism), as well as neurotic aspects (i.e., vulnerable narcissism; e.g., Krizan & Herlache, 2018).

3.4.3 Narcissism and Well-Being

Changes in well-being scores were mostly non-significant. When comparing the well-being scores of Part I and Part III of the study, I found that there was only a significant change in depression. Therefore, I only tested how the coping styles could explain reduction in depression. I tested this model for all four types of narcissism, and found that only the models with adaptive and maladaptive narcissism as predictor (whilst controlling for the other) were significant. In these models I found significant negative

direct effects between maladaptive narcissism and change in depression, and a positive association between adaptive narcissism and change in depression, but only in the model with maladaptive narcissism as focal predictor. Furthermore, there was a negative association between adaptive narcissism and mental escapism, and positive with downplaying and looking for help; and a positive association between maladaptive narcissism and looking for help. In both models, only one significant association emerged between coping styles and change in depression: a positive association between anger/aggression and change in depression. In these models testing the effects of adaptive and maladaptive narcissism on change in depression, I found no significant indirect effects resulted in any of these models. Therefore, although the models with each type of narcissism as predictors accounted for 14% to 24% of the variance in change in depression, it is not clear how the coping styles contributed to such a change. Other factors may have played a role. Participant idiosyncrasies may be one of them. Several participants stated that they enjoyed taking part in the study and reflecting on their lives over a period of 15 days. So, perhaps study participation contributed to some extent in reduction of depression. Further research is needed to identify what factors explain a reduction in depressive symptoms.

3.4.4 Concluding Remarks

Use of coping styles change over time and there were differences in use of coping styles among grandiose, adaptive, maladaptive, and vulnerable narcissism. Future research, then, will do well to include all four narcissism types. As a limitation, the study lacked the potential to test multilevel moderated mediation, as it could not relate the use of different coping styles to types of stressors experienced. The proposed models were too complex. Future work might want to test for moderated mediation in a single level design. Testing in Study 2 for simple moderation (as in Study 1) would not do the data justice, as the repeated measures component would be ignored, resulting in up to four models per person. As

another limitation, the study was conducted online. I did this for efficiency and due to lack of funding, but follow-up research should extend the generalizability of the findings to a laboratory setting. The third limitation was the high attrition rate, despite increasing prize draw entries and sending repeated reminders.

This study was the first to identify narcissists' motivations for using certain coping styles in times of stress. Having obtained direct and indirect effects that clarify the role of these motivations, I can turn to a manipulation or intervention to find out if I could alter narcissistic use of coping styles.

Chapter 4 Study 3 – Is It Possible to Change Narcissists Use of Different Coping Strategies?

4.1 Introduction

Studies 1 and 2 provided evidence that narcissists use a range of coping strategies when experiencing a stressful situation. The use of each of these strategies is nuanced when considering grandiose and vulnerable narcissism, as well as the breakdown of grandiose narcissism into its adaptive and maladaptive components. The previous two studies showed a mix of consistent and inconsistent findings and leave unanswered the question of whether narcissists can change their coping strategies. Therefore, Study 3 adds to the previous studies in three main ways: (1) by replicating the social support effects with dispositional mediators and a hypothetical stressor, (2) by examining effects of (dispositional) mediators on the coping strategies using hypothetical stressor, and (3) testing whether self-affirmation can alter narcissists' coping strategies.

Regarding mixed results, Study 1 and Study 2 showed some inconsistencies in the mediators of narcissists' use of social support. In Study 1 (which focused on a most stressful recalled event), I found evidence that grandiose narcissists use social support in times of stress. The increased use of social support in times of stress seemed to be mainly driven by the perception that it is an opportunity to exploit other people. In Study 2 (which assessed repeated every day events), I did not replicate these findings; instead, use of social support increased via the perceived availability of social support. However, I obtained similar results across studies in regards to the adaptive and maladaptive components. Adaptive narcissists did not perceive social support as a weakness, but saw it as available, whereas maladaptive narcissists saw it as a weakness and an opportunity to exploit others. The differences were explained by a lack of significant effects between these perceptions towards using social support. Vulnerable narcissists (in both studies) viewed social support

as a weakness and an opportunity to exploit others, and not as healthy and available. Again, the difference resulted from the lack of significant effects between the direct effects from these mediators and use of social support. Phrasing of mediators was a potential contributor to the results discrepancy: In Study 1, these perceptions were all situational, whereas in Study 2, they were all dispositional. In Study 3, I continue to use the dispositional framework in search of stronger evidence for motivations underlying use of social support following a manipulation.

I also found mixed results pertaining to narcissists' use of different coping strategies across studies. In Study 1, I identified coping styles that narcissists use in times of stress, and reported differences in use of these strategies between the types of narcissism. In Study 2, I identified mechanisms underlying narcissists' adoption of coping styles in times of stress. Across studies, I found that grandiose narcissists used more risky ingestion, planful problem solving, downplaying, anger/aggression, active escapism, and looking for spiritual help. Adaptive and maladaptive narcissism, though, were associated with differential use of coping styles. Whereas adaptive narcissism was linked to an increase in planful problem solving, maladaptive narcissism was linked to an increase in risky ingestion, anger/aggression, and looking for help. Finally, vulnerable narcissism was also linked to increase in use of several coping styles, such as risky ingestion, planful problem solving, mental escapism, and anger/aggression.

A key unanswered question from the above patterns is whether narcissist can change their coping styles. In Study 3, I tested for use of coping strategies by again implementing dispositional phrased mediators (as in Study 2) rather than situational ones (as in Study 1).

In addition, I expanded upon Studies 1-2 by introducing a manipulation. Researchers have established techniques that reduce the (negative) consequences of narcissistic behaviour, such as self-affirmation (Giacomin, & Jordan, 2018; Thomaes,

Bushman, DeCastro, Cohen, & Denissen, 2009). This technique is extensively validated, and cements the integrity of the self in a global view by considering strengths in other areas (Cohen & Sherman, 2014; McQueen & Klein, 2006; Steele, 1988), This increases the view of being capable and adaptive (Badea & Sherman, 2019), which in turn is associated with less need to rationalise away anything that can be perceived as a threat (Sherman & Cohen, 2006; Steele, 1988). In particular, values affirmations reduce defensive responses, and reduces feelings of stress; which boosts psychological resources people have to cope with stress, broadens peoples' perspective of events and information in life (including external resources, and people/relationships they care about), and reduces the impact of threat on affecting the self (e.g., Sherman, 2013). For example, value-affirmed people don't feel the need to establish self-integrity in the domain, and are therefore becoming more open and responsive to (the needs of) others (Kenrick, Griskevicius, Neuberg, & Schaller, 2010). Such an interpersonally attuned mind-set should evoke prosocial feelings and behaviours. Supporting this theory, research has found that self-affirmation can increase the openness of smokers to anti-smoking information (Crocker, Niiya, & Mischkowski, 2008), and makes athletes take more responsibility for their teams' defeat and less credit for their success (Sherman & Kim, 2005). In narcissists, self-affirmation has been linked to reducing aggression (Thomaes et al., 2009) and reducing verbal hostility (Wang & Jordan, 2017).

Finally, as in Study 1, I will return to a framework where I explore the effects different type of stressors (agentic, communal, and external) have on use of different coping strategies. I do this because previous research on self-affirmation has found that people experiencing the greatest threat in a domain are the ones who benefit the most (e.g., Harris & Napper, 2005; Jaremka et al., 2011; Sherman et al., 2000, Study 1). Therefore self-affirmation may be most effective for narcissists when experiencing agentic stressors (compared to communal or external stressors).

4.2 Present Research

In the current Study, I implemented a self-affirmation manipulation as a way to buffer narcissists from the psychological consequences of a stressful situation (i.e., a threat). Following theoretical models of narcissism, I hypothesised that an activation of important values would increase narcissists' self-importance and intrapsychic strategies. This would influence both the grandiosity and vulnerability of a narcissist (e.g., Narcissism Spectrum Model; Krizan & Herlache, 2018), as well as stimulate their interpersonal skills and strategies (e.g., Extended Agency Model; Campbell & Foster, 2007). Thus, following a self-affirmation manipulation, all types of narcissists would be buffered for the negative effects of the stressors, compared to those who did not receive self-affirmation. Furthermore, in line with previous research, I hypothesised that self-affirmation would be associated with increased openness and responsiveness to others and evoking prosocial behaviours (e.g., Crocker et al., 2008; Kenrick et al., 2010). Therefore, I hypothesised that, in times of stress, narcissists in the self-affirmation (vs. control) condition would be less likely to use harmful coping styles such as anger/aggression, while increasing more helpful coping styles such as planful problem solving, social support, considering perspective, and looking for help. To explore short-term effects of self-affirmation on narcissistic behaviour in times of stress, I used hypothetical stressors (Ognibene & Collins, 1998) and examined participants' reports about the ways in which they would cope with stressors.

In summary, I aimed to (1a) find additional evidence for narcissists' motivations to use different coping styles in times of stress, (1b) find additional evidence for differences between different subtypes of narcissism, (2) examine how this manipulation would affect use of coping strategies in times of stress [using a hypothetical stressor], and (2c) and examine whether type of stressor had an effect on these findings.

4.3 Method

4.3.1 Participants

Originally, I recruited 927 participants via several online platforms. Of these, 174 failed to answer all instructional manipulation checks correctly, and thus were excluded from analyses. Participants were further excluded for not meeting inclusion criteria (no age provided, or too young, $n = 7$), not following instructions (i.e., no description about why they found some values important, $n = 7$), no report about how they would feel when experiencing a certain stressor, $n = 1$), no written statement about both values and stressor ($n = 1$), or taking break after the manipulation ($n = 2$). The final sample consisted of 735 participants (599 women, 131 men). The majority of participants had English as a first language (84.40 %).

Participants' age ranged from 18 to 74 years ($M_{age} = 23.66$, $SD_{age} = 9.34$). They were residents of 33 different countries, mostly the United Kingdom ($n = 490$), and the United States ($n = 160$). The majority classified their ethnicity as White (76.73 %). The other ethnic backgrounds were Asian (3.67 %), Black (4.36 %), mixed (7.76 %), other (7.35 %), and unreported (0.14 %).

The highest degree of education that participants achieved was one or more years of college, no degree (17.80 %), a high school graduate – high school diploma or equivalent (13.10 %), Associate degree (52.00 %), Bachelor's degree (9.50 %), Master's degree (4.50 %), a Doctorate degree (1.80 %), or a professional degree (0.3 %). Most the participants were students (78.50 %) or employed full-time (11.60 %). The remaining were employed part-time (5.70 %), unemployed (2.20 %), home-makers (0.50 %), or otherwise employed (1.50 %).

Table 4.1
Overview of the Number of Participants in Each Condition

Condition	*Stressor*	Undergraduate students (credits) (*n*)	General Population (prizedraw) (*n*)	Total (*n*)
Control				
	Agentic	72	54	**126**
	Communal	75	42	**117**
	External	68	44	**112**
Self-Affirmation				
	Agentic	82	51	**133**
	Communal	75	38	**113**
	External	76	58	**134**
	Total (*n*)	**448**	**287**	**N = 735**

4.3.2 Materials and Procedure

This online study was advertised as "How do you cope with stressful or difficult situations?" via several online platforms (e.g., www.callforparticipants.com, http://psych.hanover.edu/research/exponnet.html, onlinepsychresearch.co.uk, and socialpsychology.org), adverts on the University of Southampton website, and adverts placed around the University Campus. Students could participate to gain research credits, whereas non-students had the option to provide an e-mail address for a prize draw to win one of six Amazon vouchers (1x £50, and 5x £10).

Participants first provided demographic information (e.g., age, gender, education level, nationality, ethnicity, first language, and occupation), followed by some personality measures, then by behavioural and social support measures. Next, in line with Critcher and colleagues (2010) participants were randomly allocated into one of two conditions: their most important values (self-affirmation condition) or to write about their least important values (control condition). Subsequently, participants were allocated to one of three stressor-conditions (i.e., agentic, communal, or external), in which they read a vignette describing a stressful situation. Finally, they answered questions about how they would cope with the situation described in the vignette.

4.3.2.1 Personality questionnaires

4.3.2.1.1 Narcissism

As before, I assessed grandiose narcissism with the 40-item NPI (Raskin & Terry, 1988). Scores ranged from 0 to 39 *(M* = 10.55, *SD* = 6.28, α = .84). Following Barry and colleagues (Barry et al., 2007; Barry & Malkin, 2010), I computed mean scores for adaptive narcissism (i.e., self-sufficiency and authority items; α =. 75) and maladaptive narcissism (i.e., exhibitionism, exploitativeness, and entitlement items; α = .68). Consistent with past research (Barry et al., 2007; Hepper et al., 2014, Studies 1 and 2), adaptive and maladaptive narcissism correlated positively, $r(733) = .51$, $p < .001$.

4.3.2.1.2 Hypersensitive Narcissism Scale.

I assessed vulnerable narcissism with the HSNS (Hendin & Cheek, 1997). Scores ranged from 11 to 72 (*M* = 42.13, *SD* = 11.06, α = .76). Consistent with past research, and the previous two studies, grandiose and vulnerable narcissism did not correlate, $r(731) = .02$, $p = .596$.

4.3.2.2 Behavioural and Social Support Questionnaires

In the next part of the survey, participants were asked to answer to which extent they agreed or disagreed with each statement. They were asked about their feelings, thoughts, behaviours, and relationships with other people in your life.

4.3.2.2.1 Approach and Avoidance Behaviours

As in Study 2, I measured approach and avoidance behaviours with the short version of the BIS (3 items; α = .77) and BAS (6 items; α = .76; Carver & White, 1994).

4.3.2.2.2 Impulsivity

As in Study 2, I measured impulsive behaviour with the 4-item (negative) Urgency sub-scale of the shortened version of the UPPS-P Impulsive Behaviour Scale (α = .77; Whiteside & Lynam, 2000).

4.3.2.2.3 Self-Enhancement, Self-Protection, and Optimism

I measured self-enhancement (α = .84) and self-protection (α = .67) motivation with the (SESP-SF; Hepper et al., 2010), and measured optimism with the LOT-R (Scheier, Carver & Bridges, 1994; α = .87), as in Study 2.

4.3.2.2.4 Perceived Availability of Social Support

As per Studies 1 and 2, the Perceived Availability of Social Support-Scale (PASS), consisted of twelve items about participants feelings towards the availability of social support (α = .94).

4.3.2.2.5 Perceptions of Social Support

I measured participants' perceptions of social support with a 9-item questionnaire (as per Study 2). Three perceptions were: belief that social support-seeking is weak (3 items, α = .74), belief that social support can be used to manipulate and exploit others (3 items, α = .48), and belief that social support is natural and healthy (3 items, α = .80).

4.3.2.3 Self-Affirmation Manipulation

Participants were randomly allocated to one of two conditions: to report either their most important values (self-affirmation condition) or their least important values (control condition; Sherman & Cohen, 2006). Next, participants composed a short paragraph of why these values were most/least important to them. Afterward, participants in the self-affirmation reported the extent to which they cared about these values, these values influence their life, or these values determined the type of person they were. Participants in the control condition reported the extent to which other people cared about these values, were influenced by these values, or these values determine what type of person these others are. Response options ranged from 1 (*not at all*) to 8 (*very much so*).

4.3.2.4 Stressful Situation

I conducted pilot studies to construct appropriate hypothetical stressful situations for use in the main study (see Appendix D for full details). In line with Study 1, I was

interested in stressors that clearly captured agentic, communal, or external stressors. These stressors had to be similar in level of perceived stress and be perceived as different. In all pilot studies, I aimed to have approximately 25 participants rate each stressor. Following the hypothetical stressful situations, participants answered the following questions about stressors: how stressful/upsetting/controllable/threatening they found the event, and how confident they felt coping with this situation. Participants also rated the extent to which scenarios were agentic (i.e., caused by having personal goals / accomplishments), communal (i.e., caused by an interaction between themselves and other people), and/or external (i.e., caused by something outside their control). Response options ranged from 1 (*not at all*) to 8 (*very much so*).

The final stressors all scored relatively high on external attributions, but the agentic stressor was perceived as significantly more agentic than both communal and external stressors, and the communal stressor was perceived as more communal than the other stressors. I finalised the hypothetical stressors as follows. The *agentic* stressor was: “Please imagine that you are very busy at work. Out of the blue you have been given a two week deadline to complete an additional task. It is important to meet this deadline. In order to complete the task you will have to work very long hours. You are not sure how you are going to complete this task in addition to all of your other work obligations, which also have tight deadlines. Despite your increased quantity of work it is very important that you don't let the quality suffer.” The *communal* stressor was: “Please imagine that a close friend invites you to a party. When both of you arrive, however, your friend leaves you to go talk with his/her other friends for the entire night. You do not know these friends, nor does your friend bother to introduce you. You don't know anyone else at the party. Unfortunately, you can not leave the party without your friend as they drove you to the party. You are supposed to be going on holiday with this close friend in two weeks but you think this situation will have put a strain on your friendship.” The *external* stressor was:

"Please imagine that your home has been partially destroyed in a flood due to a burst pipe. A rapid response team were called to come and isolate the water supply. Some of your belongings have been destroyed and there is water damage throughout the property. As a result, you will have to move out for two weeks. It will take a lot of time and effort to sort everything and repair the damage." In the main study, participants were randomly assigned to one of the three scenarios, and after reading them, they were asked to write in a few words how they would feel and what they would do if this happened to them. This was in order to make sure that participants would really think about how such an experience would impact on them, and increase the validity of the results.

4.3.2.5 Coping Questions

Finally, participants answered questions regarding how they would cope with the hypothetical stressful situation. They indicated the extent to which they would use each coping-strategy during and right after, the stressful situation just described. These 36 coping items were identical to the ones in Study 2, and could be classified into nine coping styles (as in Study 2): social support, risky ingestion, planful problem solving, mental escapism, downplaying, anger/aggression, active escapism, considering perspective, and looking for (spiritual) help.

The coping strategy seeking social support, comprised 12 items measured (e.g., "I would rely on others for comfort"; α = .93). All other coping styles comprised three items: Risky ingestion (e.g., "I would find it difficult to stop eating once I had started", α = .62), planful problem solving (e.g., "I would know what had to be done, so I would double my efforts to make things work", α = .75), mental escapism (e.g., "I would have fantasies or wishes about how things might turn out", α = .52), downplaying (e.g., "I would go on as if nothing happened", α = .68), anger/aggression (e.g., "I would take it out on other people", α = .80), active escapism (e.g., "I would do some sport or exercise", α = .67), considering

perspective (e.g., “I would try to see things from the other persons point of view”, α = .51), looking for (spiritual) help (e.g., “I would find new faith”, α = .68).

4.4 Results

4.4.1 Data Preparation

I collected data in two surveys, one involving a student sample (for credits) and another a community sample (with an entry into a prize draw). I downloaded data from each sample separately, but later combined them. Then I checked for differences across the datasets (see Table A4.1). For variables characterised by differences, I used date source as a covariate. In models that included adaptive and maladaptive narcissism, I controlled for the existing effects of the other subtype of narcissism when testing the effects of the other.

I then checked for normality of the data, classifying items with Z-scores of +/- 3.29 as outliers (Field, 2013). I reduced the raw scores of outliers to be one meaningful unit above the next outlier in the data-set (Tabachnick & Fidell, 2013). When outliers were already one unit above the next outlier, I made them identical to that outlier. Next, I checked skewness and kurtosis, using cut-off scores of +/-2 (Field, 2013). I identified no issues regarding skewness and kurtosis.

4.4.2 Correlations

I present an overview of all zero-order correlations between the four types of narcissism and the mediators, as well as between mediators and coping strategies in Table A4.2.

These correlations show that grandiose narcissism was significantly positively related to the perceptions that social support is available and an opportunity to exploit, behavioural approach, self-enhancement, self-protection and optimism; and negatively correlated with the perception that support is a weakness, and with behavioural avoidance.

Adaptive narcissism was significantly positively correlated with the perceptions that support is healthy and available, behavioural approach, self-enhancement, and

optimism, whereas it was negatively correlated with the perception that support is a weakness, behavioural inhibition, and impulsivity.

Maladaptive narcissism was significantly positively correlated with the perception that asking for support is an opportunity to exploit, with behavioural approach motivations, impulsivity, self-enhancement, self-protection, and optimism. Furthermore, it was negatively correlated with behavioural avoidance.

Vulnerable narcissism was significantly positively correlated with the perception that asking for support is a weakness, an opportunity to exploit, behavioural inhibitions motivation, impulsivity, and self-protection, whereas it was negatively correlated with the perceptions that asking for support is healthy and available, with self-enhancement motivations, and with optimism.

4.4.3 Does Type of Narcissism Predict Use of Coping Strategies?

To test the hypothesis that narcissists use different coping strategies in times of stress, I ran regression models with each type of narcissism as predictors and all coping styles as outcome variables. I ran separate models for the control condition (see Table 4.2) and the self-affirmation condition (see Table 4.3).

In the models of the control condition, these regressions were not all significant, and explained up to 12.5% of the variance in use of a coping style. No subtype of narcissism predicted use of downplaying or considering perspective. Grandiose narcissism was positively associated with greater use of planful problem solving, active escapism, and looking for (spiritual) help. Adaptive narcissism was associated positively with greater use of planful problem solving and looking for (spiritual help), and less use of risky ingestion, mental escapism, and anger/aggression. Contrastingly, maladaptive narcissism was linked to greater use of social support, risky ingestion, mental escapism, and anger/aggression, and less use of considering perspective. Finally, vulnerable narcissism was associated with more risky ingestion, mental escapism, anger/aggression, and less planful problem solving.

In the self-affirmation models, these regressions were not all significant, and explained up to 11.6% of the variance in use of a coping style. Grandiose narcissism was linked to more use of planful problem solving, downplaying, anger/aggression, active escapism, considering perspective, and looking for help. Adaptive narcissism was associated with less risky ingestion, mental escapism, and more planful problem solving, downplaying, active escapism, considering perspective and looking for help. Contrastingly, maladaptive narcissism was associated with more risky ingestion, mental escapism, anger/aggression, and less planful problem solving, considering perspective, and looking for help. Finally, vulnerable narcissism was linked to more use of social support, risky ingestion, mental escapism, anger/aggression, and less use of planful problem solving or considering perspective in times of stress.

These results seem to indicate that it is possible to change narcissists' behaviour following a self-affirmation manipulation, however, more testing is needed.

Table 4.2

Associations Between Each Type of Narcissism as Predictor and Averages of Each Coping Style as Outcome Variable (in the Control Condition)

	R^2	F [a]	*p*	B	β	*t*	*p*	95% CI of B	
								LL	UL
Social Support									
Grandiose Narcissism	0.002	0.80	.37	0.46	.05	0.89	.37	-0.55	1.46
Adaptive Narcissism	**0.017**	**3.13**	**.045**	-0.79	-.11	-1.88	.06	-1.62	0.04
Maladaptive Narcissism	**0.017**	**3.13**	**.045**	**1.33**	**.14**	**2.36**	**.02**	**0.22**	**2.44**
Vulnerable Narcissism	0.000	0.04	.84	0.01	.01	0.20	.84	-0.12	0.15
Risky Ingestion									
Grandiose Narcissism	0.008	2.77	.10	-0.89	-.09	-1.66	.10	-1.94	0.16
Adaptive Narcissism	**0.041**	**7.54**	**.001**	**-1.65**	**-.23**	**-3.78**	**< .001**	**-2.51**	**-0.79**
Maladaptive Narcissism	**0.041**	**7.54**	**.001**	**1.54**	**.16**	**2.63**	**.01**	**0.39**	**2.68**
Vulnerable Narcissism	**0.045**	**16.48**	**< .001**	**0.29**	**.21**	**4.06**	**< .001**	**0.15**	**0.43**
Planful Problem Solving									
Grandiose Narcissism	**0.023**	**8.24**	**.004**	**1.42**	**.15**	**2.87**	**.00**	**0.45**	**2.40**
Adaptive Narcissism	**0.049**	**8.97**	**< .001**	**1.71**	**.25**	**4.21**	**< .001**	**0.91**	**2.51**
Maladaptive Narcissism	**0.049**	**8.97**	**< .001**	-0.88	-.10	-1.62	.11	-1.95	0.19
Vulnerable Narcissism	**0.018**	**6.42**	**.012**	**-0.17**	**-.13**	**-2.53**	**.01**	**-0.31**	**-0.04**
Mental Escapism									
Grandiose Narcissism	0.011	3.76	.05	-1.05	-.10	-1.94	.05	-2.11	0.02
Adaptive Narcissism	**0.060**	**11.27**	**< .001**	**-2.07**	**-.28**	**-4.73**	**< .001**	**-2.93**	**-1.21**
Maladaptive Narcissism	**0.060**	**11.27**	**< .001**	**1.17**	**.12**	**2.00**	**.046**	**0.02**	**2.32**
Vulnerable Narcissism	**0.093**	**36.11**	**< .001**	**0.42**	**.31**	**6.01**	**< .001**	**0.29**	**0.56**
Downplaying									
Grandiose Narcissism	0.001	0.44	.51	0.37	.04	0.66	.51	-0.72	1.45
Adaptive Narcissism	0.001	0.26	.77	-0.29	-.04	-0.63	.53	-1.18	0.61
Maladaptive Narcissism	0.001	0.26	.77	0.38	.04	0.63	.53	-0.82	1.58
Vulnerable Narcissism	**0.023**	**8.15**	**.005**	**-0.21**	**-.15**	**-2.86**	**.005**	**-0.36**	**-0.07**
Anger/Aggression									
Grandiose Narcissism	0.007	2.33	.13	0.87	.08	1.53	.13	-2.52	1.99
Adaptive Narcissism	**0.058**	**10.84**	**< .001**	**-1.22**	**-.16**	**-2.65**	**.01**	**-2.13**	**-0.32**
Maladaptive Narcissism	**0.058**	**10.84**	**< .001**	**2.86**	**.27**	**4.63**	**< .001**	**1.65**	**4.07**
Vulnerable Narcissism	**0.125**	**50.49**	**< .001**	**0.52**	**.35**	**7.11**	**< .001**	**0.38**	**0.66**
Active Escapism									
Grandiose Narcissism	**0.024**	**8.64**	**.004**	**1.77**	**.16**	**2.94**	**.004**	**0.59**	**2.95**
Adaptive Narcissism	0.013	2.40	.09	0.56	.07	1.11	.27	-0.43	1.54
Maladaptive Narcissism	0.013	2.40	.09	0.75	.07	1.11	.27	-0.57	2.07
Vulnerable Narcissism	0.006	2.27	.13	-0.13	-.08	-1.51	.13	-0.29	0.04
Considering Perspective									
Grandiose Narcissism	0.000	0.10	.76	-0.14	-.02	-0.31	.76	-1.07	0.78
Adaptive Narcissism	0.016	2.92	.06	0.57	.09	1.47	.14	-0.19	1.33
Maladaptive Narcissism	0.016	2.92	.06	**-1.23**	**-.15**	**-2.39**	**.017**	**-2.25**	**-0.22**
Vulnerable Narcissism	0.004	1.51	.22	-0.08	-.07	-1.22	.22	-0.20	0.05
Looking for (spiritual) Help									
Grandiose Narcissism	**0.040**	**14.74**	**< .001**	**2.29**	**.20**	**3.84**	**<.001**	**1.12**	**3.46**
Adaptive Narcissism	**0.048**	**8.93**	**< .001**	**1.93**	**.23**	**3.91**	**< .001**	**0.96**	**2.89**
Maladaptive Narcissism	**0.048**	**8.93**	**< .001**	-0.33	-.03	-0.51	.61	-1.63	0.96
Vulnerable Narcissism	0.000	0.16	.69	0.03	.02	0.40	.69	-0.13	0.20

Note: [a] degrees of freedom for grandiose narcissism: 1, 353; for adaptive and maladaptive narcissism: 2, 352.

Table 4.3

Associations Between Each Type of Narcissism as Predictor and Averages of Each Coping Style as Outcome Variable (in the Self-Affirmation Condition)

	R^2	F [a]	*p*	B	β	*t*	*p*	95% CI of B	
								LL	UL
Social Support									
Grandiose Narcissism	0.008	3.02	.08	0.81	.09	1.74	.083	-0.11	1.73
Adaptive Narcissism	0.004	0.81	.45	0.37	.06	0.90	.37	-0.43	1.16
Maladaptive Narcissism	0.004	0.81	.45	0.17	.02	0.29	.772	-0.96	1.29
Vulnerable Narcissism	**0.010**	**3.99**	**.047**	**-0.14**	**-.10**	**-2.00**	**.047**	**-0.27**	**0.00**
Risky Ingestion									
Grandiose Narcissism	0.001	0.21	.65	0.23	.02	0.46	.65	-0.77	1.23
Adaptive Narcissism	**0.028**	**5.43**	**.005**	**-1.03**	**-.14**	**-2.35**	**.019**	**-1.88**	**-0.17**
Maladaptive Narcissism	**0.028**	**5.43**	**.005**	**1.96**	**.19**	**3.20**	**.001**	**0.76**	**3.16**
Vulnerable Narcissism	**0.062**	**25.05**	**< .001**	**0.37**	**.25**	**5.01**	**< .001**	**0.22**	**0.51**
Planful Problem Solving									
Grandiose Narcissism	**0.036**	**14.11**	**< .001**	**1.70**	**.19**	**3.76**	**< .001**	**0.81**	**2.59**
Adaptive Narcissism	**0.086**	**17.64**	**< .001**	**2.22**	**.34**	**5.81**	**< .001**	**1.47**	**2.98**
Maladaptive Narcissism	**0.086**	**17.64**	**< .001**	**-1.09**	**-.12**	**-2.04**	**.043**	**-2.15**	**-0.04**
Vulnerable Narcissism	**0.043**	**17.10**	**< .001**	**-0.28**	**-.21**	**-4.14**	**< .001**	**-0.41**	**-0.15**
Mental Escapism									
Grandiose Narcissism	0.001	0.53	.47	-0.33	-.04	-0.73	.47	-1.21	0.56
Adaptive Narcissism	**0.037**	**7.18**	**.001**	**-1.37**	**-.21**	**-3.59**	**< .001**	**-2.12**	**-0.62**
Maladaptive Narcissism	**0.037**	**7.18**	**.001**	**1.58**	**.18**	**2.94**	**.003**	**0.52**	**2.64**
Vulnerable Narcissism	**0.112**	**47.30**	**< .001**	**0.43**	**.33**	**6.88**	**< .001**	**0.31**	**0.56**
Downplaying									
Grandiose Narcissism	**0.025**	**9.54**	**.002**	**1.54**	**.16**	**3.09**	**.002**	**0.56**	**2.52**
Adaptive Narcissism	**0.025**	**4.90**	**.008**	**1.14**	**.16**	**2.64**	**.009**	**0.29**	**1.99**
Maladaptive Narcissism	**0.025**	**4.90**	**.008**	0.02	.00	0.03	.974	-1.18	1.21
Vulnerable Narcissism	0.003	1.30	.26	-0.09	-.06	-1.14	.255	-0.23	0.06
Anger/Aggression									
Grandiose Narcissism	0.009	3.54	.06	0.95	.10	1.88	.06	-0.04	1.95
Adaptive Narcissism	**0.044**	**8.63**	**< .001**	-0.82	-.11	-1.90	.06	-1.67	0.03
Maladaptive Narcissism	**0.044**	**8.63**	**< .001**	**2.52**	**.25**	**4.14**	**< .001**	**1.32**	**3.71**
Vulnerable Narcissism	**0.119**	**50.91**	**< .001**	**0.50**	**.35**	**7.14**	**< .001**	**0.36**	**0.64**
Active Escapism									
Grandiose Narcissism	**0.048**	**18.97**	**< .001**	**2.41**	**.22**	**4.36**	**< .001**	**1.32**	**3.50**
Adaptive Narcissism	**0.071**	**14.37**	**< .001**	**2.29**	**.28**	**4.82**	**< .001**	**1.35**	**3.22**
Maladaptive Narcissism	**0.071**	**14.37**	**< .001**	-0.37	-.03	-0.56	.58	-1.68	0.94
Vulnerable Narcissism	0.000	0.02	.88	-0.01	-.01	-0.15	.88	-0.18	0.15
Considering Perspective									
Grandiose Narcissism	**0.015**	**5.62**	**.018**	**1.02**	**.12**	**2.37**	**.018**	**0.17**	**1.87**
Adaptive Narcissism	**0.052**	**10.24**	**< .001**	**1.66**	**.27**	**4.53**	**< .001**	**0.94**	**2.38**
Maladaptive Narcissism	**0.052**	**10.24**	**< .001**	**-1.19**	**-.14**	**-2.31**	**.021**	**-2.20**	**-0.18**
Vulnerable Narcissism	**0.012**	**4.61**	**.032**	**-0.14**	**-.11**	**-2.15**	**.032**	**-0.26**	**-0.01**
Looking for (spiritual) Help									
Grandiose Narcissism	**0.020**	**7.84**	**.005**	**1.64**	**.14**	**2.80**	**.005**	**0.49**	**2.79**
Adaptive Narcissism	**0.056**	**11.03**	**< .001**	**2.35**	**.28**	**4.70**	**< .001**	**1.36**	**3.33**
Maladaptive Narcissism	**0.056**	**11.03**	**< .001**	**-1.83**	**-.15**	**-2.61**	**.010**	**-3.21**	**-0.45**
Vulnerable Narcissism	0.005	1.78	.18	-0.12	-.07	-1.33	.18	-0.29	0.06

Note: [a] degrees of freedom for grandiose and vulnerable narcissism: 1, 376; for adaptive and maladaptive narcissism: 2, 375.

4.4.4 Moderating Effect of Self-Affirmation on Narcissists' Coping Strategies and Mechanisms

To test the hypothesis that narcissistic behaviour can be changed by inducing a self-affirmation task and impact use of coping strategies, I ran moderated mediation models comparing the direct and indirect effects in the control and the self-affirmation condition. I tested this model with one second stage moderator using PROCESS v3.0, model 15 (Hayes, 2018a; see Figure 4.1). It is a second stage model, because the moderator (i.e., condition) was induced after collecting information on the mediators. I ran separate models with each type of narcissism as predictor (X), different coping styles as outcome variables (Y), and condition as moderator (i.e., control vs self-affirmation manipulation; W), having different mediators for each outcome variable (M-variables). Where necessary, I controlled for differences in survey-source, and the simultaneous presence of adaptive and maladaptive narcissism (U-variables) (see Figure 4.1).

Each model provided overall model fit indices and significance (R^2, F, p), direct effects between predictor and mediators (a-paths), direct effects between mediator variables and outcome variable (b-paths), direct effects between predictor variable and outcome variable (c'-path), and indirect effects of predictor variable on outcome variable via each of the mediators (a*b; see Figure 4.2). Additionally, they provided information on interaction effects between predictor and moderator (X*W), or mediators and moderator (M_k*W; Hayes, 2018a, 2018b). Given that I was interested in differences depending on level of narcissism, I only probed these interactions (i.e., X*W) when significant. This means that only then the conditional direct effects of narcissism on coping style were relevant to check for differences relating to condition.

To test for the effect of condition on coping strategies via all mediators, I computed the *index of moderated mediation*. This index displays whether there was a significant difference between the conditional indirect effect of the self-affirmation and control

conditions. A significant index was evidenced by a 95% Confidence Interval (CI) that did not encompass zero. When a significant index of moderated mediation was displayed, I examined the conditional indirect effects via the mediators for the two conditions (i.e., self-affirmation vs control). When no significant index was displayed, that there was not enough evidence for moderated mediation (i.e., there were no significant differences in mediation between the self-affirmation and control conditions).

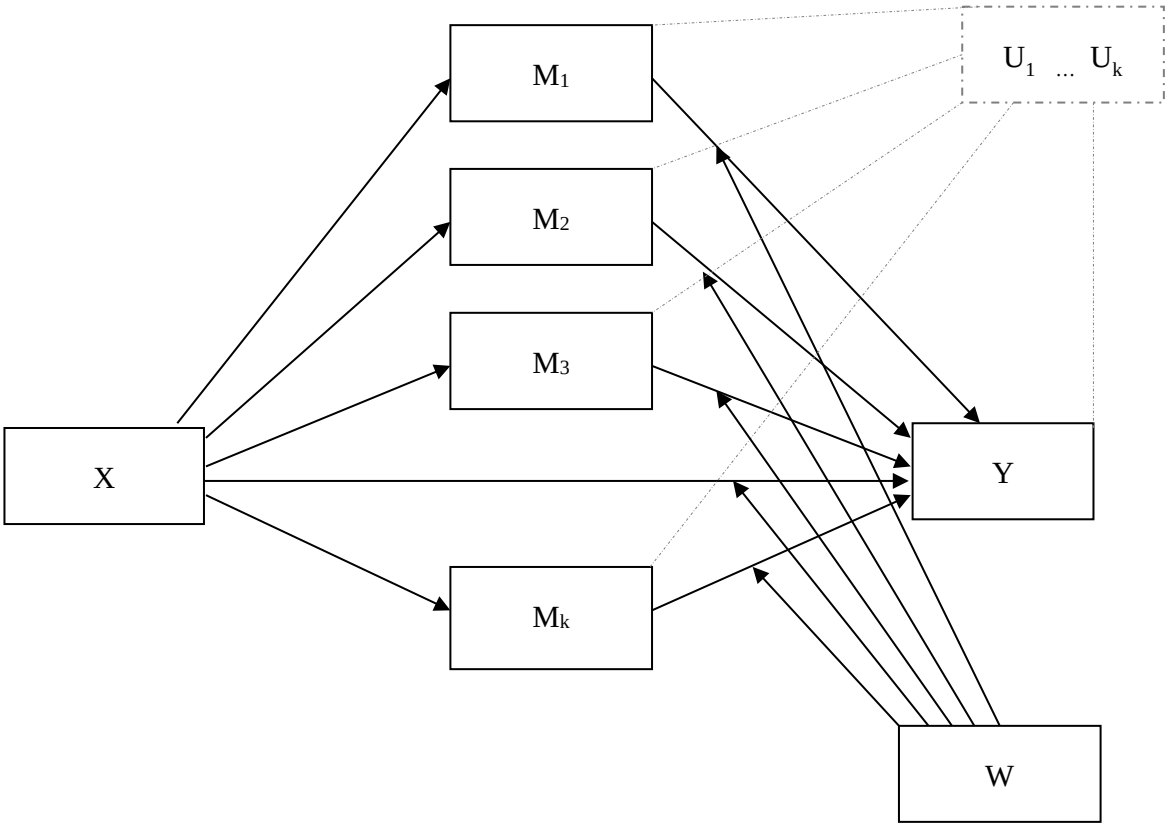


Figure 4.1 Conceptual model of a second stage moderated mediation model with predictor X (i.e., the four components of narcissism), 4 mediators (M_1-M_k; i.e., the behaviours), outcome variable Y (i.e., the coping styles), and moderator W (i.e., control vs self-affirmation condition), and covariate U (i.e., source).

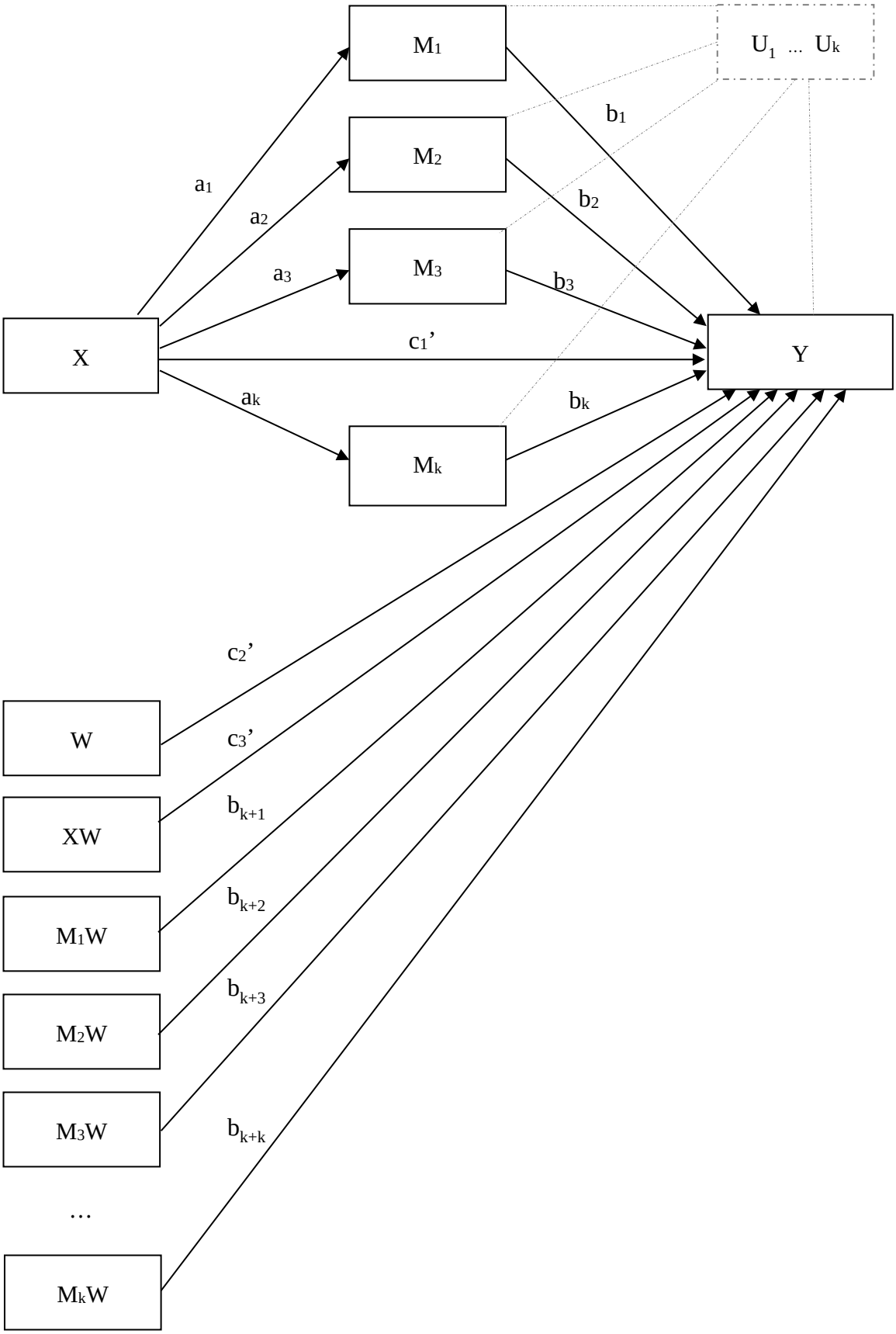


Figure 4.2 Statistical model of a second stage moderated mediation model with predictor X (i.e., the four components of narcissism), 4 mediators (M_1-M_k; i.e., the behaviours), outcome variable Y (i.e., the coping styles), moderator W (i.e., control vs self-affirmation condition), and covariate U (i.e., source).

4.4.4.1 Model Fit of all Models

All tested models were significant and explained between 11.43% and 29.82% of variance in each of the coping styles (see Table 4.4). For each outcome variable, the explained variance was quite similar irrespective of the predictor. However, there were some differences in explained variance between outcome variables. For example, the models on use of social support in times of stress explained the most variance, between 29.03% and 29.82%. Least variance was explained in the models on use of active escapism and considering perspective (11.43% to 13.22%).

I have discussed all models below, but for simplicity reasons I have described only the directions of significant results in the text, and omit non-significant direct and indirect effects (for full details, see Appendix A, Table A4.3 – Table A4.38). More specifically, I have discussed indirect effects, only when the moderated mediation is significant. Furthermore, when the interaction between narcissism and condition (X*W) was non-significant, I have omitted describing the conditional direct effects of narcissism on coping styles from the text. These results are still displayed in the tables.

Table 4.4

Explained Variance and Model Statistics for Each Moderated Mediation Model with Type of Narcissism as Predictor and Coping Style as Outcome Variable

	R^2	F	df_1	df_2	p
Social Support					
Grandiose Narcissism	0.2903	24.54	12	720	< .001
Adaptive Narcissism	0.2931	22.93	13	719	< .001
Maladaptive Narcissism	0.2923	22.84	13	719	< .001
Vulnerable Narcissism	0.2984	25.52	12	720	< .001
Risky Ingestion					
Grandiose Narcissism	0.2186	22.35	9	719	< .001
Adaptive Narcissism	0.2147	19.63	10	718	< .001
Maladaptive Narcissism	0.2157	19.74	10	718	< .001
Vulnerable Narcissism	0.2108	21.34	9	719	< .001
Planful Problem Solving					
Grandiose Narcissism	0.2217	15.60	13	712	< .001
Adaptive Narcissism	0.2256	14.80	14	711	< .001
Maladaptive Narcissism	0.2251	14.75	14	711	< .001
Vulnerable Narcissism	0.2230	15.72	13	712	< .001
Mental Escapism					
Grandiose Narcissism	0.1632	10.68	13	712	< .001
Adaptive Narcissism	0.1711	10.48	14	711	< .001
Maladaptive Narcissism	0.1686	10.30	14	711	< .001
Vulnerable Narcissism	0.1746	11.59	13	712	< .001
Downplaying					
Grandiose Narcissism	0.1289	7.00	15	710	< .001
Adaptive Narcissism	0.1388	7.14	16	709	< .001
Maladaptive Narcissism	0.1345	6.88	16	709	< .001
Vulnerable Narcissism	0.1241	6.70	15	710	< .001
Anger/Aggression					
Grandiose Narcissism	0.2402	17.39	13	715	< .001
Adaptive Narcissism	0.2428	16.35	14	714	< .001
Maladaptive Narcissism	0.2423	16.31	14	714	< .001
Vulnerable Narcissism	0.2431	17.67	13	715	< .001
Active Escapism					
Grandiose Narcissism	0.1231	7.72	13	715	< .001
Adaptive Narcissism	0.1322	7.77	14	714	< .001
Maladaptive Narcissism	0.1259	7.34	14	714	< .001
Vulnerable Narcissism	0.1251	7.87	13	715	< .001
Considering Perspective					
Grandiose Narcissism	0.1217	11.06	9	719	< .001
Adaptive Narcissism	0.1264	10.39	10	718	< .001
Maladaptive Narcissism	0.1248	10.24	10	718	< .001
Vulnerable Narcissism	0.1141	10.28	9	719	< .001
Looking for (spiritual) Help					
Grandiose Narcissism	0.1770	10.97	14	714	< .001
Adaptive Narcissism	0.1817	10.55	15	713	< .001
Maladaptive Narcissism	0.1892	11.09	15	713	< .001
Vulnerable Narcissism	0.1784	11.08	14	714	< .001

4.4.4.2 Direct Effects in all Models

Direct effects in all models varied in exact strength, but were quite similar with regards to significance and direction of the effects. Table 4.5 shows the direct effects between subtypes of narcissism and all mediators (top half), as well as the direct effects between mediators and outcome variables (bottom half).

Table 4.5
Summarising Table Displaying Directions Of Significant Direct Effects in Moderated Mediation Models, Top Half (Panel A) Displays Direct Effects Between Different Types Of Narcissism, And All Mediators, Bottom Half (Panel B) Displays Direct Effects Between All Mediators And Outcome Variables.

A

	Weak	Exploit	Health	PASS	BIS	BAS	I	SP	SE	O
GN	-	+	+	+	-	+	x	+	+	+
AN	-	-	+	+	-	+	-	+	-	+
MN	+	+	x	x	+	+	+	x	+	-
VN	+	+	-	-	+	x	+	x	+	-

B

	SS	RI	PPS	ME	D	A	AE	CP	LfH
Weak	x								
Exploit	+								
Health	+								
PASS	+								x
BIS				+	-	+°	x		
BAS			+˜	x	x	x	x		x
I		+	x		x	+	+	x	x
SP		+	-	+	x	+	x	-	+
SE		-^	+	x	x	x	+	+	+
O			x	x	x				

Note: GN=Grandiose Narcissism; AN=Adaptive Narcissism; MN= Maladaptive Narcissism; VN=Vulnerable Narcissism; Weakness = perception that asking support is a weakness; Exploit = perception that asking for support is an opportunity to manipulate and exploit; Health = perception that asking support is natural and healthy; PASS = Perceived Availability of Social Support; BIS = Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SE = Self-Enhancement; SP = Self-Protection; O = Optimism; EC = External Locus of Control; IC = Internal Locus of Control; SS = Social Support; RI = Risky Ingestion; PPS = Planful Problem Solving; ME = Mental Escapism; D = Downplaying; A = Anger/Aggression; AE = Active Escapism; CP = Considering Perspective; LfH = Looking for (spiritual) Help;
- = negative effect; + = positive effect; x = were non-significant effects; ^ = only marginally significant in GN, rest significant; ° = not significant in VN; ˜= marginally significant in VN, rest significant.

4.4.4.2.1 Direct Effects From Narcissism to Motivations

These direct effects are mostly in line with Studies 1 and 2. The differences found do not lie in the direction of these effects, but in their significance.

In this study, grandiose narcissism was positively associated with grater motivation to exploit others, the perception that support is healthy and available, more approach motivation, and greater motivation to self-enhance and self-protect, as well as be optimistic. Also, they were less likely to perceive social support as a weakness and were lower in avoidance motivation.

Adaptive narcissism was positively associated with greater perception that support is healthy and available, more approach motivated, and greater motivations to self-enhance, as well as be optimistic. Also, they were less likely to perceive support-seeking as a weakness, as an opportunity to exploit, and as less likely to use avoidance motivations, act impulsively and self-enhance.

Maladaptive narcissism was positively associated with greater perceptions that support-seeking was a weakness and an opportunity to exploit others, greater approach and avoidance motivations, act impulsively, and self-protect. Furthermore, it was associated with lower optimism.

Finally, vulnerable narcissism was positively associated with greater perceptions that asking for support was a weakness and an opportunity to exploit others, as well as have greater motivations to approach motivations, and greater motivations to act impulsively, and self-protect. Additionally, vulnerable narcissism was associated with lower perceptions that social support was healthy and available, as well as be less optimistic.

4.4.4.2.2 Direct Effects From Mediators to Use of Coping Strategies

The perception that seeking support was an opportunity to exploit others, was perceived as healthy and available, were all associated with increased use of social support.

Avoidance motivations were associated with increased use of mental escapism and anger/aggression in times of stress, but decreased use of downplaying. Approach motivations increased active escapism, and impulsivity related to increased use of risky ingestion and anger/aggression in times of stress. The motive to self-protect was related to more risky ingestion, mental escapism, downplaying, anger/aggression, active escapism, and looking for help, but less planful problem solving and considering perspective. The motive to self-enhance was related to more planful problem solving, considering perspective, and looking for help. Finally, being more optimistic was associated with more planful problem solving and more downplaying. No other direct effect was significant.

Despite using hypothetical stressors (Study 3), rather than autobiographical stressors (Studies 1-2), the direct effects between mediators and outcome variables were similar to those of Studies 1-2. A notable exception was that, in Study 3 (as opposed to Study 2), optimism was unrelated to planful problem solving, mental escapism, and downplaying. Approach motivation was related to planful problem solving (compared with no relations in Study 2).

4.4.4.3 Social Support

The models testing the influence of each type of narcissism on use of social support via the perceived availability of social support and support-related motivations to use or not to use social support (i.e., seeing it as a weakness, an opportunity to exploit, and/or natural and healthy) did not show a significant index of moderated mediation via any of the mediators, meaning there were no significant differences between the control and self-affirmation conditions. There were, however, still some significant indirect effects via these mediators for the self-affirmation condition, the control condition, or both.

In the grandiose narcissism model (see Table A4.3), there were significant positive indirect effects via the motivation to exploit, and the perceived availability of social support, in both the control and self-affirmation conditions, meaning these mediators

increased narcissists' support seeking. The direct effect of narcissism on social support seeking was non-significant, indicating that after controlling for the indirect effects, narcissists were not more likely to seek support.

In the adaptive narcissism model (see Table A4.4), in both the control and self-affirmation conditions, I found a significant negative indirect effect via the willingness to exploit others: higher narcissism was linked to reduced willingness to exploit others, and this in turn was associated with less use of social support. Additionally, I obtained significant positive indirect effects via the perception that asking for support is healthy, and that support is perceived as available: increase in narcissism was related to increase in these perceptions, which in turn was associated with use of social support. There was also a significant negative main effect of adaptive narcissism on use of social support: After accounting for all the indirect effects, the remaining effect was negative, i.e., those scoring higher on adaptive narcissism were less likely to seek support.

In the maladaptive narcissism model (Table A4.5), there was a significant positive indirect effect via the motivation to exploit other people in both conditions, meaning high maladaptive narcissists' support-seeking (shown in regressions; Table 4.2 for the control condition) was explained by their willingness to exploit others.

The vulnerable narcissism model (see Table A4.6) showed no significant moderated mediation. However, there was a significant positive indirect effect via the motivation to exploit in both conditions, meaning an increase in vulnerable narcissism was linked to an increase in willingness to exploit others, which in turn was related to more support-seeking. I also found significant negative indirect effects via the perception that asking for support is healthy, and perceived as available in both conditions: higher vulnerable narcissism was linked to lower perceptions that support is natural/healthy, and available; these perceptions in turn were linked to lower support-seeking. Vulnerable narcissists' significant lower use of social support in the self-affirmation condition (shown

in regressions, Table 4.3), was not corroborated in these mediation models. In fact, there was a significant positive main effect from vulnerable narcissism to support seeking, meaning vulnerable narcissists were using more support seeking than lower vulnerable narcissists when controlling for the effects of the mediators.

4.4.4.4 Risky Ingestion

Models tested the effect of each type of narcissism on use of risky ingestion as a coping strategy via three mediators (i.e., impulsivity, self-enhancement, self-protection). These displayed moderated mediation (i.e., a significant difference between conditional indirect effects) for maladaptive and vulnerable narcissism, only via self-protection.

In the grandiose narcissism model (see Table A4.7), there were no significant indices of moderated mediation. However, there was a significant positive indirect effect via self-protection in both conditions (i.e., higher narcissism was linked to greater self-protection, which was associated with more risky ingestion), and a significant negative indirect effect via self-enhancement in the self-affirmation condition, which was driven by the link between higher narcissism and higher self-enhancement. Thus, narcissists' self-enhancement and self-protection motivations may counteract each other in influencing their use of risky ingestion. Furthermore, there was an interaction between grandiose narcissism and condition, showing that after controlling for the mediators, the residual effect of narcissism on risky ingestion was non-significant (slightly negative in the control condition, but significantly positive in the self-affirmation condition). Speculatively, it may be that self-affirmation reduces narcissists' tendency to use risky ingestion for self-enhancing reasons but increase it for self-protective and other reasons not measured in this study.

In the adaptive narcissism model (Table A4.8), there were no significant indices of moderated mediation. However, there were significant negative indirect effects via impulsivity and self-protection motives (in both conditions). That is, higher adaptive

narcissism was associated with a decrease in impulsivity and self-protection, and lower impulsivity and self-protection was in turn associated with lower use of risky ingestion. Furthermore, the interaction between narcissism and condition was significant, but neither conditional direct effect was significant.

In the model with maladaptive narcissism (Table A4.9), there was a significant negative index of moderated mediation via the motivation to self-protect, meaning that although the indirect effect via self-protection was significant in both conditions, it was significantly smaller in the self-affirmation condition. Therefore, self-affirmation reduced maladaptive narcissists' proneness to use risky ingestion via the motivation to self-protect. Furthermore, the indirect effects via impulsivity were also significantly positive in both conditions (i.e., higher maladaptive narcissism was linked to greater impulsivity, which in turn was associated with higher risky ingestion), the two conditions did not differ significantly from one another. However, there was also a significant interaction between maladaptive narcissism and condition, showing that (similar to grandiose narcissism), the direct effect of maladaptive narcissism on risky ingestion was significantly positive in the self-affirmation condition, but not significant in the control condition. Thus, self-affirmation has reduced the tendency to use risky ingestion for self-protective reasons but still has a residual tendency for some other narcissistic reason.

In the model with vulnerable narcissism (Table A4.10) there was a significant negative index of moderated mediation for the motive to self-protect. This means that although the indirect effect via self-protection was non-significant in the self-affirmation condition, it was significantly smaller, compared to the control condition. Therefore, self-affirmation reduced maladaptive narcissists' proneness to use risky ingestion via the motivation to self-protect. Increased use of risky ingestion via the motivation to self-protect was significantly higher in the control condition than the self-affirmation condition. Additionally, the conditional indirect effects via impulsivity was significant and positive in

both conditions (i.e., an increase in narcissism was associated with an increase in impulsivity, which was associated with an increase in use of risky ingestion). Vulnerable narcissists' significant higher use of risky ingestion in both conditions (shown in regressions: control Table 4.2, self-affirmation Table 4.3), seems to be underpinned by impulsivity (regardless of condition) and self-protection (somewhat buffered in the self-affirmation condition).

4.4.4.5 Planful Problem Solving

Models tested the effect of each type of narcissism on use of planful problem solving as a coping strategy via mediators behavioural approach, impulsivity, self-protection, self-enhancement, and optimism. The models did not display any moderated mediation, meaning there were no differences between the control and self-affirmation conditions in narcissists' use of this coping style. However, there were still some significant indirect effects via these mediators for either the self-affirmation or control condition, or both (see Table A4.11 - Table A4.14).

In the model with grandiose narcissism as predictor (see Table A4.11), there were no significant indices of moderated mediation. However, for both conditions there was a significant negative indirect effect via the motivation to self-protect (i.e., higher narcissism was associated with greater self-protection, which was associated with reduced use of planful problem solving). Additionally, there were significant positive indirect effects via the motivation to self-enhance, and behavioural approach (i.e., an increase in narcissism was linked to an increase in these motivations, which was associated with greater use of planful problem solving).

In the models with adaptive narcissism or maladaptive narcissism (see Table A4.12), there were no significant indices of moderated mediation. However, in the model with adaptive narcissism as focal predictor, there were significant positive indirect effects via behavioural approach, the motivations to self-enhance and self-protect (all in both

conditions), and impulsivity (only in the self-affirmation condition). An increase in adaptive narcissism was linked to greater behavioural approach and self-enhancing, which in turn was associated with more planful problem solving. Adaptive narcissism was also linked to a decrease in self-protection, which was related to more planful problem solving. Given that there was no significant effect between impulsivity and use of planful problem solving, the positive indirect effect via impulsivity was explained by the association between adaptive narcissism and reduced impulsive behaviour. In the model with maladaptive narcissism as focal predictor (see Table A4.13), there was a significant positive indirect effect via behavioural approach in both conditions, meaning higher maladaptive narcissism was linked to greater behavioural approach, which in turn was associated with higher use of planful problem solving. Additionally, I found negative indirect effects via impulsivity (only in the self-affirmation condition, driven by higher narcissism relating to more impulsive behaviour) and the motivation to self-protection (in both conditions, driven by the self-protection conducing to more planful problem solving). This means that the non-significant use of planful problem solving in the control condition (shown in regressions: Table 4.2) was most likely underpinned by these opposing effects via behavioural approach and self-protection. The significant negative effect of maladaptive narcissism on use of planful problem solving in the self-affirmation condition (shown in regressions: Table 4.3), was most likely underpinned by these two opposing effects, and by the significant negative effect via impulsivity.

In the model of vulnerable narcissism (see Table A4.14), there were no significant indices of moderated mediation. However, there was a significant negative conditional indirect effects via self-protection (in both conditions so that higher vulnerable narcissism was linked to greater self-protection, which in turn was associated with less use of planful problem solving) and impulsivity (only in the self-affirmation condition, so that higher narcissism was linked to greater impulsivity, with the effect of impulsivity on planful

problem solving not being significant). Thus, vulnerable narcissists showed less use of planful problem solving (shown in regressions: Table 4.2 - Table 4.3) because of their self-protection and perhaps their impulsivity (in the self-affirmation condition).

4.4.4.6 Mental Escapism

The models explaining the effect of each type of narcissism on use of mental escapism as a coping strategy via its proposed mediators (i.e., behavioural inhibition, behavioural approach, self-enhancement, self-protection, and optimism) did not show any significant indices of moderated mediation

In the model with grandiose narcissism (see Table A4.15), there were significant negative indirect effects for both conditions via avoidance motivation, meaning higher narcissism was linked with an increase in avoidance motivation, which in turn was linked with greater use of mental escapism. I also found significant positive indirect effects via the motivation to self-protect in both conditions, meaning higher narcissism was linked to greater self-protection, which in turn was associated with more mental escapism. In the self-affirmation condition, I found a significant negative indirect effect via level of optimism: This was driven by the positive association between narcissism and greater optimism.

In the model with adaptive narcissism (see Table A4.16), there were significant negative indirect effects via behavioural inhibition and the tendency to self-protect (in both conditions), and via level of optimism (only in the self-affirmation condition), whereas in the model with maladaptive these indirect effects were positive (see Table A4.17). Whereas adaptive narcissism was linked with lower behavioural inhibition and self-protection, and greater optimism, maladaptive narcissism was linked with higher behavioural inhibition and self-protection, and lower optimism. Furthermore, there was a significant interaction between adaptive narcissism and condition. Thus, after accounting for the effects of mediators, adaptive narcissists were less likely to use mental escapism in

the control condition, but this was no longer significant in the self-affirmation condition. The negative/positive associations between adaptive and maladaptive narcissism and mental escapism regardless of condition (as shown in regressions: Table 4.2 - Table 4.3) seem to be explained by these mediators.

The model with vulnerable narcissism as predictor showed significant positive indirect effects via behavioural inhibition and self-protection in both conditions. Higher narcissism was linked with greater behavioural inhibition and self-protection, which in turn was associated with greater use of mental escapism (see Table A4.18). Furthermore, the conditional direct effect of vulnerable narcissism on use of mental escapism was significant in both the control and self-affirmation conditions. All these positive associations seem to explain the use of mental escapism regardless of condition (as shown in regressions: Table 4.2 - Table 4.3).

4.4.4.7 Downplaying

The models testing the effect of each type of narcissism on use of downplaying as a coping strategy in times of stress via mediators (behavioural inhibition, behavioural approach, impulsivity, self-enhancement, self-protection, and optimism) showed evidence of moderated mediation but only with adaptive narcissism as predictor via behavioural inhibition.

The model with adaptive narcissism as predictor showed a significant negative index of moderated mediation for the effect on use of downplaying via behavioural inhibition, meaning that despite still using downplaying, adaptive narcissists used less downplaying in the self-affirmation versus control condition due to their lower behavioural inhibition (see Table A4.20). Furthermore, there was a significant positive indirect effect via self-enhancement, but only in the self-affirmation condition. This indirect effect on use of downplaying was driven by the finding that an increase in adaptive narcissism was associated with an increase in self-enhancement.

The model with grandiose narcissism as predictor yielded no significant moderated mediation. However, in both the self-affirmation and control conditions, there was a significant positive indirect effect via behavioural inhibition, meaning higher narcissism was associated with lower behavioural inhibition, which in turn was associated with greater use of downplaying. In the self-affirmation condition there was also a significant positive indirect effect via self-enhancement, which was driven by the direct effect of higher narcissism contributing to greater self-enhancement (see Table A4.19). The increase in narcissists' downplaying (shown in regressions of the self-affirmation condition: Table 4.3) seems to result from their self-enhancement.

In the model with maladaptive narcissism (see Table A4.21), there was no moderated mediation, but there were significant negative indirect effects via behavioural inhibition (in both conditions), meaning an increase in maladaptive narcissism was linked to an increase in behavioural inhibition, which in turn was associated with a decrease in downplaying. Additionally, I found a significant positive indirect effect (in the self-affirmation condition) via behavioural approach, which was driven by higher maladaptive narcissism relating to greater behavioural approach. Overall, these two opposing effects cancelled each other out, given the non-significant total effect in the self-affirmation condition (see regression Table 4.3). In the control condition there was also a non-significant total effect (see regression Table 4.2), this might be explained by other non-tested effects.

The model with vulnerable narcissism displayed no significant moderated mediation (see Table A4.22). There were significant negative indirect effects via behavioural inhibition in both conditions, meaning that higher vulnerable narcissism was linked to lower behavioural inhibition, which in turn related to more downplaying. Thus, the positive association shown in the regressions (Table 4.2), was accounted for by behavioural inhibition.

4.4.4.8 Anger/Aggression

The models testing the effect of each type of narcissism on use of anger/aggression as a coping strategy in times of stress via mediators (behavioural inhibition, behavioural approach, impulsivity, self-enhancement, and self-protection) did not show any significant indices of moderated mediation nor an interaction between narcissism and condition.

The model with grandiose narcissism as predictor displayed a significant positive indirect effect of narcissism on use of anger/aggression via the motivation to self-protect in both the self-affirmation and the control condition: higher narcissism was linked with greater self-enhancement, which in turn was associated with more use of anger/aggression in times of stress. In the control condition, I also found a significant negative indirect effect via behavioural inhibition: higher narcissism was associated with lower behavioural inhibition, which was associated with reduced use of anger/aggression (Table A4.23).

The model with adaptive narcissism displayed significant indirect effects of adaptive narcissism on use of anger/aggression via the tendencies to act impulsively and to self-protect (in both conditions), both driven by relations between narcissism and less impulsive behaviour and less self-protection, and thus less use of anger/aggression (see Table A4.24).

For the model with maladaptive narcissism, I found significant positive indirect effects via impulsivity and the motive to self-protect (in both conditions); here, higher narcissism was linked with greater impulsivity and self-protection, which in turn was associated with more anger/aggression. I also found a significant positive indirect effect via behavioural inhibition, but only in the control condition; here, higher narcissism was linked to more behavioural inhibition, which in turn was associated with greater anger/aggression (see Table A4.25). Furthermore, maladaptive narcissism had a residual direct effect on aggression, meaning that impulsivity, self-protection, and behavioural inhibition do not entirely account for maladaptive aggressive reactions to stress.

The model with vulnerable narcissism as predictor displayed significant positive indirect effects via impulsivity and the motive to self-protect; here, higher narcissism was linked to great impulsivity and self-protection, which was related with more anger/aggression. As with maladaptive narcissism, vulnerable narcissism had a residual direct effect on aggression (see Table A4.26).

4.4.4.9 Active Escapism

The models explaining the effect of each type of narcissism on use of active escapism as a coping strategy via its mediators (i.e., behavioural inhibition, behavioural approach, impulsivity, self-enhancement, and self-protection) did not show significant indices of moderated mediation.

The model with grandiose narcissism as predictor displayed a significant positive indirect effect via approach-motivations and self-protection. Higher narcissism was linked with greater approach-motivations and higher self-protection in both conditions, which in turn was associated with an increase in active escapism. Additionally, in the control condition, there was a significant positive indirect effect via the motive to self-protect, so that higher narcissism was related to greater self-protection, which in turn contributed to more active escapism (see Table A4.27).

In the models with adaptive and maladaptive narcissism as predictor, there were significant positive indirect effects in both conditions via approach motivations; here, higher adaptive or maladaptive narcissism was associated with an increase in approach motivations, which in turn was linked to an increase in use of active escapism in times of stress. Additionally, I found significant indirect effects via the motive to self-protect in both conditions. For adaptive narcissism, this was a negative indirect effect, meaning an increase in narcissism was linked with a lesser need to self-protect, which was associated with lower use of active escapism (Table A4.28). For maladaptive narcissism, there was a positive indirect effect, meaning an increase in narcissism was linked with a stronger need

to self-protect, which was associated with higher active escapism (see Table A4.29). Furthermore, in the model with adaptive narcissism there was a significant interaction between adaptive narcissism and condition, which showed there was a conditional effect of adaptive narcissism on active escapism, but only in the self-affirmation condition. Thus, despite the negative effect via self-protection, the positive association shown in the regressions (see Table 4.3), was accounted for by behavioural inhibition, and the residual direct effect of adaptive narcissism.

Despite a non-significant total effect of narcissism (see regression Table 4.2 - Table 4.3), the model with vulnerable narcissism displayed a significant positive indirect effect via the motivation to self-protect in both conditions, meaning higher vulnerable narcissism was associated with an increase in need to self-protect, which was in turn linked to an increase in active escapism (see Table A4.30).

4.4.4.10 Considering Perspective

Models tested the effect of each type of narcissism on use of considering perspective as a coping strategy via three mediators (i.e., impulsivity, self-enhancement, and self-protection). These models did not yield significant indices of moderated mediation, nor significant interactions between condition and type of narcissism.

In the model with grandiose narcissism as predictor (see Table A4.31), there were significant positive indirect effects via the motive to self-enhance (in both conditions): higher narcissism was linked with an increase in self-enhancement, which related to an increase in considering other people's perspectives in stressful situations. Additionally, I found a significant negative indirect effect via the motivation to self-protect (in both conditions): higher narcissism was linked to greater self-protection, which was linked with a decrease in considering other people's perspectives. These two effects seem to have cancelled each other in the overall models displaying the total effect of narcissism in both conditions (see regressions: Table 4.2 - Table 4.3),

In the model with adaptive narcissism as predictor, there were significant positive indirect effects via the motives to self-protect and self-enhance in both conditions, meaning higher adaptive narcissism was associated with greater self-enhancement and lower self-protection, both of which were associated with higher consideration of other people's perspectives (Table A4.32). For maladaptive narcissism, I found a significant negative indirect effect via the motive to self-protect, meaning higher narcissism was associated with more self-protection strategies, which in turn was associated with lower consideration of other people's perspectives (Table A4.33). Furthermore, there was a significant negative direct effect in the control condition, making maladaptive narcissists even less likely to consider others' perspectives.

In the model with vulnerable narcissism as predictor (see Table A4.34), there was a significant negative indirect effect from narcissism on considering perspective via self-protection (in both conditions): higher vulnerable narcissism was linked with a stronger need to self-protect, which in turn was associated with lower use of considering perspective.

4.4.4.11 Looking for (spiritual) Help

The models tested the effect of each type of narcissism on use of looking for (spiritual) help as a coping strategy via five mediators (i.e., perceived availability of support, behavioural approach, impulsivity, self-enhancement, and self-protection), and did not yield significant indices of moderated mediation.

In the model with grandiose narcissism as predictor (see Table A4.35), I found a significant positive indirect effect via the motivation to self-enhance (in both conditions), meaning higher narcissism was linked with greater self-enhancement, which in turn was associated with higher help-seeking. Thus, the positive association between narcissism and looking for help (see regressions: Table 4.2 - Table 4.3), seemed to be explained by self-enhancement strategies.

In the model with adaptive narcissism, a significant positive conditional indirect effect via self-enhancement (both conditions) emerged, such that higher adaptive narcissism was linked with a greater need to self-enhance, which in turn was associated with more help-seeking. There was also negative indirect effect via self-protection (only in the control condition), which was driven by higher adaptive narcissism being linked to a weaker need to self-protect, with in turn associated with lower help-seeking (see Table A4.36). For maladaptive narcissists, a significant positive indirect effect via the motive to self-protect emerged in the control condition, meaning higher maladaptive narcissism was linked to a stronger need to self-protect, which was associated with more help-seeking (see Table A4.37). Furthermore, there was a significant interaction between condition and maladaptive narcissism, displaying a conditional negative direct effect of maladaptive narcissism on looking for help, but only in the self-affirmation condition. Thus, higher maladaptive narcissism was associated with a decrease in help-seeking in the self-affirmation condition.

The model with vulnerable narcissism as a predictor displayed a significant positive indirect effect via the motive to self-protect, but only in the self-affirmation condition: meaning after self-affirmation vulnerable narcissists' self-protection strategies were associated with more help-seeking (see Table A4.38).

4.4.4.12 Summary

Of the 36 moderated mediation models, there were three with significant moderated mediation, suggesting there were differences between the two conditions. For maladaptive and vulnerable narcissists, having being self-affirmed (vs. control) decreased predictive use of risky ingestion via the motive to self-protect. Furthermore, adaptive narcissists' use of downplaying was lower, via behavioural inhibition, in the self-affirmation condition (vs. control).

Furthermore, there were six models with a significant interaction effect between condition and narcissism. I found a significant positive interaction between condition (i.e., being self-affirmed or not), and grandiose, adaptive, and maladaptive narcissism on use of risky ingestion, as well as between condition and adaptive narcissism on use of mental or active escapism. Thus, self-affirmed narcissists used more of these specific coping styles, compared to people in the control condition. Furthermore, I found a significant negative interaction between condition and maladaptive narcissism on use of looking for help, meaning that maladaptive narcissists will reduce their looking for help when being self-affirmed, compared to those that are not self-affirmed. However, the above models did not include type of stressor. Given that participants were also assigned to different types of stressors (agentic, communal, or external), it would be helpful to test whether there were any differences in use of each coping style depending on both condition (control vs self-affirmation), as well as type of stressor experienced.

4.4.5 Analytic Technique to Test for the Effects of Self Affirmation and Type of Stressor on Use of Coping Strategies

To test the hypotheses that the motivations narcissists have for using different coping strategies depend on condition (control vs. self-affirmation) as well as type of stressor (agentic, communal, or external), I conducted moderated moderated mediation analyses with second stage moderators using PROCESS v3.0, model 19 (Hayes, 2018a; see Figure 4.3). I computed separate models for each type of narcissism as the predictor variable (X; i.e., grandiose, adaptive, maladaptive, and vulnerable), different coping style as the outcome variable (Y; i.e., social support, risky ingestion, planful problem solving, mental escapism, downplaying, anger/aggression, active escapism, considering perspective, and looking for [spiritual] help), and different mediators (M_1 to M_k) depending on the outcome variable. The moderator-variables in these models were the condition participants were in (W: control vs. self-affirmation manipulation), and type of stressor (Z;

i.e., agentic, communal, or external). Finally, where necessary, I included covariates in the models (U; i.e., survey source; adaptive or maladaptive narcissism).

Given that type of stressor (Z) is a categorical variable with three levels, two dummy-coded variables were needed in this model using PROCESS v3.0, each with 2 levels. In line with the dummy coding of stressor in Study 1, one dummy-coded variable (Z_1) compared agentic (coded as +1) with communal stressors (coded as -1), while excluding external stressor (coded as 0); the other (Z_2) compared agentic and communal stressors (both coded as +0.5) with the external stressor (coded as -1).

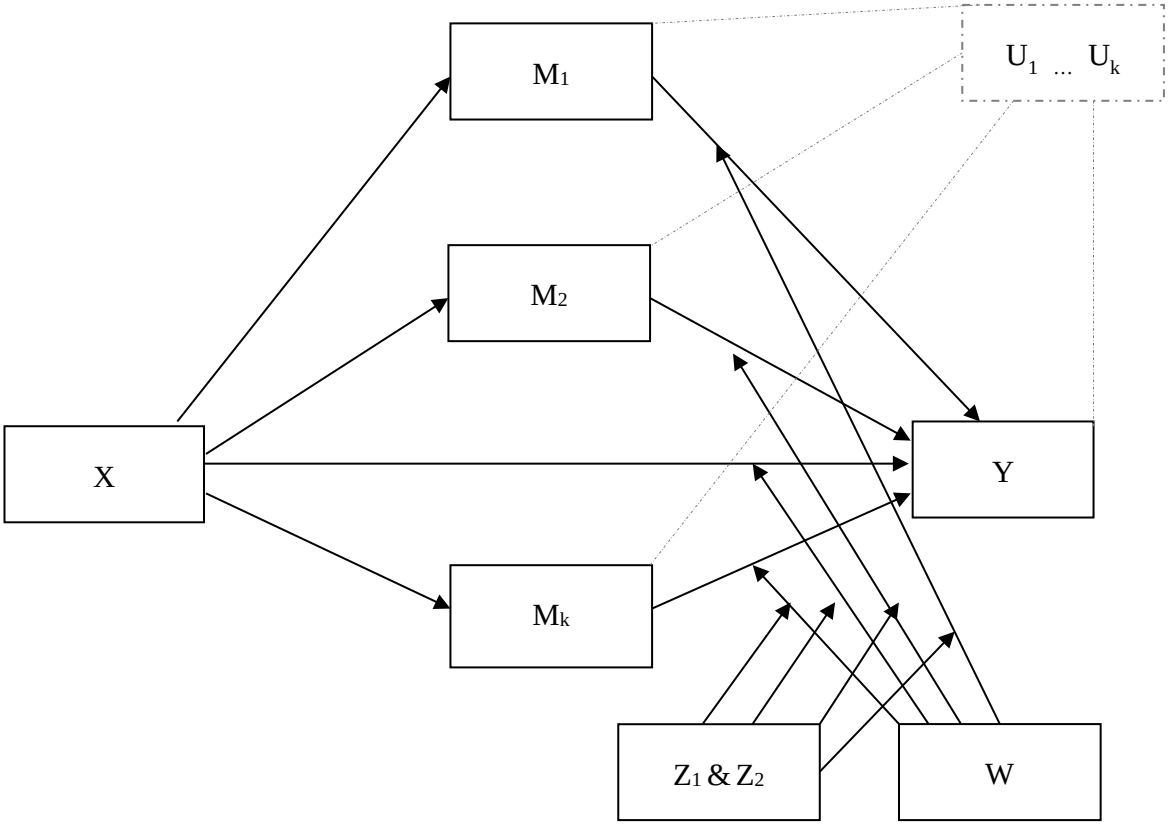


Figure 4.3 Conceptual model of a second stage moderated moderated mediation model with predictor X (i.e., the four components of narcissism), 4 Mediators (M_1-M_k; i.e., the behaviours), outcome variable Y (i.e., the coping styles), and moderator W (i.e., control vs. self-affirmation condition), and covariate U (i.e., source).

The tested models each provided overall model fit indices and significance (R^2, F, p), direct effects between the predictor, mediators, and outcome variable, and indirect effects of the predictor on the outcome variable via each of the mediators. Finally, they

produced interaction effects between the predictor and each of the moderators (X*W, $X*Z_1$, $X*Z_2$), mediators and each of the moderators (M_k*W, M_k*Z_1, M_k*Z_2), the predictor in combination with both moderators simultaneously ($X*W*Z_1$, $X*W*Z_2$), and mediators in combination with both moderators simultaneously (M_k*W*Z_1, M_k*W*Z_2; Hayes, 2018a, 2018b; see Figure 4.4). Since I only had hypotheses resulting from level of narcissism, I depict only those interactions (either one moderator or both simultaneously) in Table A4.39 - Table A4.74, whilst omitting the interaction effects between mediators and moderators.

To test whether there were significant differences between the indirect effects explaining use of coping styles among conditions and stressors, I assessed the indices of *moderated moderated mediation* and where necessary *conditional moderated mediation*.

The index of moderated moderated mediation displayed whether type of stressor moderated the moderation effect of narcissism by experimental condition. In other words, it tested whether the indirect effect of narcissism via each mediator, by condition (control vs experimental), varies with the type of stressor (agentic, communal, or external). A negative/positive moderated moderated mediation effect of Z_1 meant that the control condition had a bigger/smaller difference between the agentic and communal stressor, compared to the self-affirmation condition. A similar structure is valid for the moderated moderated mediation effect of Z_2, only this time the combined effect of agentic and communal stressors was compared to external stressors in the self-affirmation versus the control condition.

Given that the second moderator in this model was dummy coded, Z_1 tested whether there were differences between Agentic and Communal Stressors in the self-affirmation compared to the control condition. There were three types of indices for conditional moderated mediation in these models: for each indirect effect, there was an index of conditional moderated mediation by W, by Z_1, or by Z_2. The index of the

conditional moderated mediation by W displayed the difference between the conditional indirect effects of narcissism for the two experimental groups (self-affirmation vs. control), separately for each type of stressor. A significant positive index meant that, for this stressor (agentic/communal/external), this indirect effect was significantly smaller in the control condition compared to the self-affirmation condition, whereas a significant negative index meant that this indirect effect for this stressor was bigger in the control condition compared to the self-affirmation condition.

The index of the conditional moderated mediation by Z_1 displayed the differences between agentic and communal stressors within the two conditions (control or self-affirmation), whereas the index of the conditional moderated mediation by Z_2 displayed the differences between agentic and communal stressors combined, compared to external stressors, within the two conditions

Each model displayed six conditional direct and six conditional indirect effects. The conditional direct effects displayed how narcissism predicted use of each coping style for each of the six conditions (i.e., control–agentic, control–communal, control–external, self-affirmation–agentic, self-affirmation–communal, self-affirmation–external). The conditional indirect effects displayed the effects of how narcissism predicted use of each coping style via its mediating variables, depending on condition.

For all indices and effects a significant index/effect was evidenced by a 95% CI, and when these 95% CIs of the indices contained zero, there was no definitive evidence for this (moderating) effect. When a 95% CI of an index/effect did not contain zero, there was an indication that something might be different between conditions depending on type of stressor.

For simplicity reasons, I only discuss significant details regarding the stressors (Z_1 and Z_2) in the text, meaning I focus my write up on significant moderated moderated mediation effects (where necessary followed with explanations of conditional moderated

mediation), and significant interactions between predictor, moderators and mediators, (followed with explanation of conditional direct effects). If the moderated moderated mediation indices and interactions were non-significant, I omitted them from the text, but they are still displayed in the corresponding tables in Appendix A: Table A4.39 – Table A4.74.

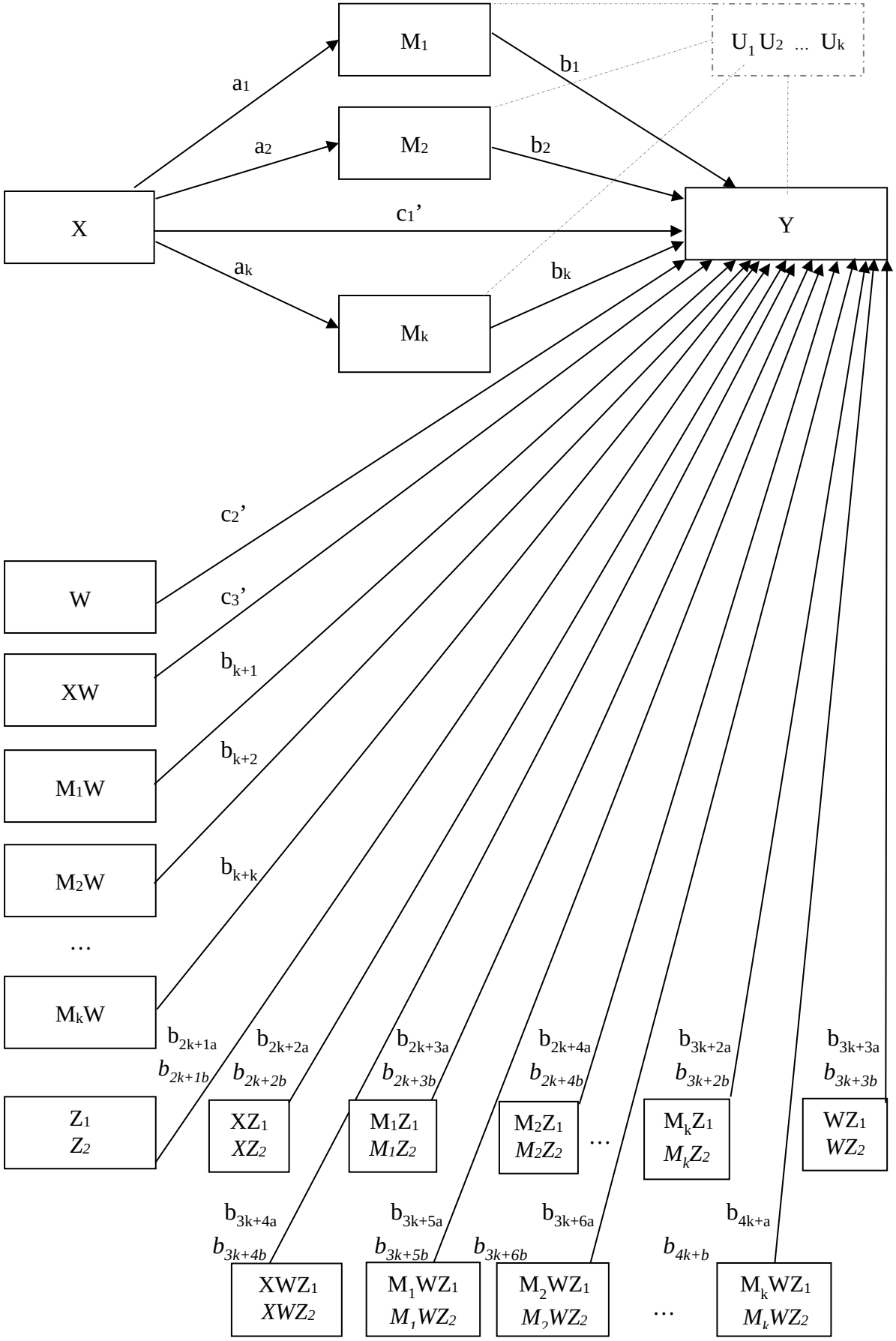


Figure 4.4 Statistical model of a second stage moderated moderated mediation model with predictor X (i.e., the four components of narcissism), 4 mediators (M_1-M_k; i.e., the behaviours), outcome variable Y (i.e., the coping styles), and moderator W (i.e., control vs self-affirmation condition), and covariate U (i.e., source).

4.4.5.1 Summary of all Models

Testing models using all four types of narcissism as predictors, and using nine coping styles in times of stress, resulted in testing 36 models. All of them were significant and explained between 16.47% and 38.56% of the variance in the outcome variables (for full details see Table 4.6). For all types of narcissism, the models testing use of social support explained most variance (approx. 38%), and the models testing use of active escapism explained least variance (approx. 16.5%).

Table 4.6
Explained Variance and Model Statistics for Each Moderated Moderated Mediation Model with Type of Narcissism as Predictor and Coping Style as Outcome Variable

	R^2	F	df_1	df_2	p
Social Support					
Grandiose Narcissism	0.3804	11.87	36	696	< .001
Adaptive Narcissism	0.3856	11.79	37	695	< .001
Maladaptive Narcissism	0.3824	11.63	37	695	< .001
Vulnerable Narcissism	0.3850	12.10	36	696	< .001
Risky Ingestion					
Grandiose Narcissism	0.2362	7.45	29	699	< .001
Adaptive Narcissism	0.2405	7.37	30	698	< .001
Maladaptive Narcissism	0.2333	7.08	30	698	< .001
Vulnerable Narcissism	0.2265	7.06	29	699	< .001
Planful Problem Solving					
Grandiose Narcissism	0.2965	7.03	41	684	< .001
Adaptive Narcissism	0.3006	6.99	42	683	< .001
Maladaptive Narcissism	0.3011	7.01	42	683	< .001
Vulnerable Narcissism	0.3016	7.21	41	684	< .001
Mental Escapism					
Grandiose Narcissism	0.2024	4.23	41	684	< .001
Adaptive Narcissism	0.2092	4.30	42	683	< .001
Maladaptive Narcissism	0.2051	4.20	42	683	< .001
Vulnerable Narcissism	0.2180	4.65	41	684	< .001
Downplaying					
Grandiose Narcissism	0.2170	4.00	47	678	< .001
Adaptive Narcissism	0.2230	4.05	48	677	< .001
Maladaptive Narcissism	0.2201	3.98	48	677	< .001
Vulnerable Narcissism	0.2115	3.87	47	678	< .001
Anger/Aggression					
Grandiose Narcissism	0.2879	6.78	41	687	< .001
Adaptive Narcissism	0.2911	6.71	42	686	< .001
Maladaptive Narcissism	0.2901	6.68	42	686	< .001
Vulnerable Narcissism	0.2929	6.94	41	687	< .001
Active Escapism					
Grandiose Narcissism	0.1648	3.31	41	687	< .001
Adaptive Narcissism	0.1688	3.32	42	686	< .001
Maladaptive Narcissism	0.1683	3.31	42	686	< .001
Vulnerable Narcissism	0.1677	3.38	41	687	< .001
Considering Perspective					
Grandiose Narcissism	0.1779	5.22	29	699	< .001
Adaptive Narcissism	0.1824	5.19	30	698	< .001
Maladaptive Narcissism	0.1851	5.29	30	698	< .001
Vulnerable Narcissism	0.1771	5.19	29	699	< .001
Looking for (spiritual) Help					
Grandiose Narcissism	0.2570	5.65	42	686	< .001
Adaptive Narcissism	0.2614	5.64	43	685	< .001
Maladaptive Narcissism	0.2674	5.82	43	685	< .001
Vulnerable Narcissism	0.2562	5.63	42	686	< .001

4.4.5.2 Direct effects in all models

Direct effects in all moderated moderated mediation models varied in strength, but were quite similar regarding significance and direction of the effects. Thus, Table 4.7 shows the direct effects between types of narcissism and all mediators (top half, panel A), as well as the direct effects between mediators and outcome variables (bottom half, panel B). All direct effects were similar to the direct effects in the previous models (i.e., the moderated mediation models; see paragraph 4.4.4.2 for description of these direct effects).

Table 4.7
Summarising Table Displaying Directions of Significant Direct Effects in the Second Stage Moderated Moderated Mediation Models: Top Half (Panel A) Displays Direct Effects Between Different Types Of Narcissism, And All Mediators, Bottom Half (Panel B) Displays Direct Effects Between All Mediators And Outcome Variables.

A

	Weak	Exploit	Health	PASS	BIS	BAS	I	SP	SE	O
GN	-	+	+	+	-	+	x	+	+	+
AN	-	-	+	+	-	+	-	-	+	+
MN	+	+	x	x	+	+	+	+	x	-
VN	+	+	-	-	+	x	+	+	x	-

B

	SS	RI	PPS	ME	D	A	AE	CP	LfH
Weak	x								
Exploit	+								
Health	+								
PASS	+								x
BIS				+ˆ	-	+°	x		
BAS			x	x	x	x	x		x
I		+	x		x	+	x	x	x
SP		+	-	+	+	+	+	-	+^
SE		-^	+	x	x	x	x	+	+
O			+	x	+				

Note: GN=Grandiose Narcissism; AN=Adaptive Narcissism; MN= Maladaptive Narcissism; VN=Vulnerable Narcissism; Weakness = perception that asking support is a weakness; Exploit = perception that asking for support is an opportunity to manipulate and exploit; Health = perception that asking support is natural and healthy; PASS = Perceived Availability of Social Support; BIS = Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SE = Self-Enhancement; SP = Self-Protection; O = Optimism; EC = External Locus of Control; IC = Internal Locus of Control; SS = Social Support; RI = Risky Ingestion; PPS = Planful Problem Solving; ME = Mental Escapism; D = Downplaying; A = Anger/Aggression; AE = Active Escapism; CP = Considering Perspective; LfH = Looking for (spiritual) Help;
- = negative effect; + = positive effect; x = were non-significant effects; ^ = only marginally significant in GN, rest significant; ° = not significant in VN.

4.4.5.3 Social Support

The model testing the effect of grandiose narcissism and the motivations for using social support in times of stress, showed a significant negative index of moderated moderated mediation via the motivation to exploit other people when comparing the combined effect of agentic and communal stressor versus the external stressor in the self-affirmation condition versus the control condition (i.e., Z_2; see Table A4.39). However, when exploring the indices of conditional moderated moderated mediation, no significant indices were found. This means that there were no differences within each stressor between both conditions, but also no differences among condition by dummy coded variables.

For adaptive narcissism, there were no significant effects of Z_1 or Z_2, nor of moderated moderated mediation, indicating that the patterns previously reported did not differ significantly by type of stressor (see Table A4.40).

For maladaptive narcissism, there was a significant negative index of moderated moderated mediation via the motivation to exploit other people when comparing agentic and communal stressors against external stressors (i.e., Z_2; see Table A4.41). However, when exploring the indices of conditional moderated moderated mediation, no significant indices were found. Meaning that despite a moderated moderated mediation effect, there were no significant conditional effects.

For vulnerable narcissism, there were no significant effects of Z_1, Z_2, or indices of moderated moderated mediation (see Table A4.42).

4.4.5.4 Risky Ingestion

The model testing the effect of narcissism on use of risky ingestion via the tendencies to act impulsively, self-enhance, and self-protect showed a significant index of moderated moderated mediation (Table A4.43): There was a significant positive index for Z_1, i.e., the comparison between agentic and communal stressor in the self-affirmation versus the control condition, via the mediator self-enhancement. Thus, the difference

between agentic and communal stressors was significantly lower in the control condition compared to the self-affirmation condition. Furthermore, I found a significant interaction effect between grandiose narcissism and condition, showing conditional negative direct effects from grandiose narcissism to use of risky ingestion in the control-communal condition, and a positive direct effect in the self-affirmation-external condition.

For adaptive narcissism, there was a significant positive index of moderated moderated mediation via self-enhancement when comparing agentic with communal stressors. Thus, the difference between agentic and communal stressors was significantly lower in the control compared to the self-affirmation condition (see Table A4.44). However, the indices of conditional moderated mediation showed no significant differences. Furthermore, there was a significant interaction between adaptive narcissism and Z_2. This is displayed in a significant negative conditional direct effect in the control-communal condition, and a significant positive direct effect in the self-affirmation-external condition.

For maladaptive narcissism, no significant index of moderated moderated mediation was found. There was a significant interaction between maladaptive narcissism and condition, which only displayed a significant positive conditional direct effect in the self-affirmation-external condition (see Table A4.45).

For vulnerable narcissism, there were no significant indices of moderated moderated mediation (see Table A4.46).

4.4.5.5 Planful Problem Solving

The model testing the effect of narcissism on use of planful problem solving via the tendencies to approach, act impulsively, self-enhance, self-protect, and optimism identified no significant indices of moderated moderated mediation, nor interactions between condition, stressor, and type of narcissism (see Table A4.47 - Table A4.50).

4.4.5.6 Mental Escapism

The model testing the effect of grandiose narcissism on use of mental escapism via the tendencies to avoid, approach, self-enhance, self-protect, and optimism displayed no evidence of moderated moderated mediation (full details in Table A4.51). However, there was a negative effect of Z_1 on use of mental escapism. There were no conditional direct effects to explain how.

For adaptive narcissism and maladaptive narcissism, there was also no evidence of moderated moderated mediation (see Table A4.52 - Table A4.53). For both types of narcissism, there was a negative effect of Z_1 on use of mental escapism. For adaptive narcissism this was partially evidenced by negative conditional direct effects in the control-agentic and control-communal conditions, whereas for maladaptive narcissists, there were no significant conditional direct effects to corroborate this.

For vulnerable narcissism, there was a significant positive moderated moderated mediation effect via optimism on use of mental escapism. This effect was explained by two significant conditional moderated mediation. A significant positive index when comparing agentic stressors within the self-affirmation versus control condition, meaning the indirect effect via optimism was significantly higher in the self-affirmation condition than the control condition. Furthermore a significant negative difference between agentic and communal stressor within the control condition suggests that the conditional indirect effect via optimism was significantly lower in the control agentic condition compared to the control-communal condition (see Table A4.54).

4.4.5.7 Downplaying

The model testing the effect of each type of narcissism on use of downplaying via the tendencies to avoid, approach, act impulsively, self-enhance, self-protect, and optimism displayed no evidence of moderated moderated mediation. However, I found a significant interaction between narcissism and Z_1, meaning there was a significant interaction between

the difference of agentic and communal stressor and narcissism. This is shown in the negative conditional direct effect from grandiose narcissism to downplaying in the control-communal condition, meaning narcissists were less likely to use downplaying when experiencing a communal stressor. All other conditional direct effects were non-significant (see Table A4.55).

For adaptive narcissism, maladaptive, and vulnerable narcissism, there were no effects of moderated moderated mediation (see Table A4.56 - Table A4.58).

4.4.5.8 Anger/Aggression

The models testing the effects of grandiose, adaptive, and maladaptive narcissism on use of anger/aggression via the tendencies to avoid, approach, act impulsively, self-enhance, and self-protect, displayed no significant effects of moderated moderated mediation, nor an effect of stressor (see Table A4.59 – Table A4.61).

For vulnerable narcissism, there was a significant positive index of moderated moderated mediation identified for the differences in indirect effects via behavioural inhibition of agentic and communal stressors compared to external stressors (see Table A4.62). Thus, this combined difference is higher in the self-affirmation than in the control condition. The conditional moderated mediation effects via behavioural inhibition revealed a significant negative difference in indirect effects only for external stressors between self-affirmation and control condition, meaning the indirect effect via self-affirmation-external condition was significantly lower than this effect in the control-external condition, and might be negative. Furthermore, the combined difference of agentic and communal stressors compared to external stressors was significantly lower in the self-affirmation condition compared to the control condition.

4.4.5.9 Active Escapism

The models testing the effect of each type of narcissism on use of active escapism via the tendencies to approach, avoid, act impulsive, self-enhance, and self-protect,

displayed no significant moderated moderated mediation or effects of stressor (see Table A4.63 –Table A4.66).

4.4.5.10 Considering Perspective

The model testing the effect of each type of narcissism on use of considering perspective via impulsivity, self-enhance, and self-protect showed a significant negative index of moderated moderated mediation via self-enhancement. This was also displayed in a conditional moderated mediation effect between the self-affirmation-communal and control-communal condition. Thus, the indirect effect was higher in the self-affirmation-communal condition compared to the control-communal condition (see Table A4.67).

For adaptive narcissism, a significant negative index of moderated moderated mediation was identified for the difference between agentic and communal stressors in the self-affirmation (vs. control) condition via self-enhancement. This difference in the self-affirmation condition was significantly lower than in the control condition. There were two significant conditional moderated mediation effects explaining this moderated moderated mediation. A positive conditional moderated mediation for the difference between self-affirmation and control when experiencing a communal stressor (meaning the effect was higher in the self-affirmation-communal condition compared to the control-communal condition) and a negative conditional moderated mediation in the self-affirmation condition between agentic and communal (meaning the indirect effect via self-enhancement was significantly higher in the self-affirmation-communal condition compared to the self-affirmation-agentic condition; see Table A4.68).

For maladaptive narcissism and vulnerable narcissism there were no effects of moderated moderated mediation (see Table A4.69 - Table A4.70).

4.4.5.11 Looking for (spiritual) Help

The model testing the effect of narcissism on use of looking for (spiritual) help via the perceived availability of support, the tendencies to approach, act impulsively, self-

enhance and self-protect, displayed a significant positive moderated moderated mediation via self-protection for the comparison between agentic and communal stressor in the self-affirmation versus the control condition. The difference between agentic and communal stressors was significantly lower in the control condition compared to the self-affirmation. This is further displayed via a significant positive conditional moderated mediation effect showing the indirect effect via self-protection was significantly higher in the self-affirmation-agentic condition compared to the self-affirmation-communal condition. Furthermore, I found a significant positive moderated moderated mediation effect in the self-affirmation condition via the perceived availability of support between agentic and communal stressors compared to external stressors (see Table A4.71). This effect was driven by the significant positive conditional moderated mediation effect in the self-affirmation condition, meaning that within this condition, the combined effect of agentic and communal stressors was higher than when experiencing external stressors.

For adaptive narcissism, there was an identical pattern of positive moderated moderated mediation via the perceived availability of support as in grandiose narcissism. Furthermore, a significant negative index of moderated moderated mediation via self-protection was identified when comparing the difference between the indirect effects in agentic and communal stressors within the self-affirmation condition with the difference of these effects within the control condition. This effect was driven by conditional moderated mediation effect when comparing the indirect effect via self-protection of the agentic stressors between self-affirmation and control, as well as the difference between agentic and communal stressors within the self-affirmation condition. This means that the indirect effect of adaptive narcissism on looking for help was significantly lower in the self-affirmation-agentic condition compared to both the self-affirmation-communal condition as the control-agentic condition (see Table A4.72). Furthermore, there was a significant negative conditional moderated mediation effect via self-protection for the difference in

agentic and communal stressors compared to the external stressors, but only in the self-affirmation condition.

For maladaptive narcissism, there was evidence of significant positive moderated moderated mediation via the motivation to self-protect. Unlike adaptive narcissism, this showed that the indirect effect of maladaptive narcissism on looking for help was significantly higher in the self-affirmation-agentic condition compared to both the self-affirmation-communal condition and the control-agentic condition (see Table A4.73 for full details). Furthermore, there was a significant positive conditional moderated mediation effect via self-protection for Z_2 in the self-affirmation condition.

For vulnerable narcissism, the identified significant positive moderated moderated mediation effect, and corresponding conditional moderated mediation effects via self-protection were identical to the ones found for maladaptive narcissism (see Table A4.74 for full details). Furthermore, a significant negative conditional moderated mediation effect via perceived availability of support was identified for the difference between the combined effect of agentic and communal stressors compared to external stressors, but only in the self-affirmation condition. The indirect effect via perceived availability was higher in the self-affirmation-external condition compared to the combined effect of the self-affirmation-agentic and self-affirmation-control condition.

4.4.5.12 Summary

Of the 36 moderated moderated mediation models (i.e., 4 types of narcissism as predictor, 9 types of coping styles as outcome variables), there were 12 models with a total of 14 significant indices of moderated moderated mediation (see Table 4.8). These moderated moderated mediation indices displayed whether type of stressor (agentic, communal, or external) moderated the moderation effect of narcissism by experimental condition (control vs experimental), i.e., it tested whether the indirect effect of narcissism via each mediator, by condition, varies with the type of stressor (index of conditional

moderated mediation by condition), as well as whether it varied by Z_1 or Z_2, among the control or self-affirmation condition. This is depicted in the indices of conditional moderated mediation (also displayed in Table 4.8). Furthermore, there were eight models with a significant interaction effect between narcissism and one or both of the moderators (i.e., condition [W] and stressor [Z_1 or Z_2]), on use of coping styles (see Table 4.9). These interaction effects are based on the conditional direct effects, as opposed to the moderated moderated mediation and conditional moderated mediation effects in Table 4.8. All these results indicated that a self-affirmation manipulation could be used to change narcissists coping strategies, but only under a strict set of circumstances.

Table 4.8
A simplified overview of significant indices of moderated moderated mediation (MMM) and corresponding indices of conditional moderated mediation (CMM) in all 36 moderated moderated mediation models.

			Index of MMM		**Index of CMM by condition (SA vs Control), among:**			**Index of CMM by Z_1, among:**		**Index of CMM by Z_2, among:**	
X	**Y**	**Mediator**	**Z_1**	**Z_2**	**A**	**C**	**E**	**Control**	**SA**	**Control**	**SA**
GN	SS	Exploit		-							
MN	SS	Exploit		-							
GN	RI	SE	+								
AN	RI	SE	+								
VN	ME	O	+		+			-			
VN	AA	BIS		+			-				-
GN	CP	SE	-			+					
AN	CP	SE	-			+			+		
GN	LfH	PASS		+							+
GN	LfH	SP	+		+				+		
AN	LfH	PASS		+							+
AN	LfH	SP	-		-				-		-
MN	LfH	SP		+	+				+		+
VN	LfH	SP		+	+				+		+

Note: MMM = moderated moderated mediation, CMM = conditional moderated mediation, Z_1 = Agentic vs Communal Stressor, Z_2 = Agentic + Communal vs External Stressor, SA = Self-Affirmation, A = Agentic, C = Communal Stressor, E = External Stressor, GN = Grandiose Narcissism, AN = Adaptive Narcissism, MN = Maladaptive Narcissism, VN = Vulnerable Narcissism, SS = Social Support, RI = Risky Ingestion, ME = Mental Escapism, AA = Anger/Aggression, CP = Considering Perspective, LfH = Looking for Help, Exploit = motivation to exploit or manipulate others, SE = Self-Enhancement, O = Optimism, BIS = Behavioural Inhibition System, SP = Self-Protection, PASS = Perceived Availability of (social) Support, + = positive index, - = negative index.

As displayed in Table 4.8, I found that there was a combined effect of stressor (agentic, communal, or external) and condition (self-affirmation vs control) on how grandiose narcissists used social support (via the perception that it an opportunity to exploit or manipulate others), risky ingestion (via self-enhancement), considering perspective (via self-enhancement), and looking for help (via perceived availability of support and self-protection); how adaptive narcissists used risky ingestion (via self-enhancement), considering perspective (via self-enhancement), and looking for help (via perceived availability of support and self-protection); how maladaptive narcissists used social support (via the perception that it an opportunity to exploit or manipulate others), and looking for help (via self-protection); and how vulnerable narcissists uses mental escapism (via optimism), anger/aggression (via behavioural inhibition), and looking for help (via self-protection).

Furthermore, there were models with main effects of condition (W: self-affirmation vs control) stressor (Z_1: agentic vs communal stressor; or Z_2: agentic and communal vs external stressor), and/or interaction effects between narcissism, stressor (Z_1 or Z_2), and/or condition (see Table 4.9).

Table 4.9
A simplified overview of significant interaction effects between narcissism, stressor, and/or condition on coping styles.

		Interaction Effects				
X	**Y**	**X*W**	**X*Z_1**	**X*Z_2**	**X*W*Z_1**	**X*W*Z_2**
GN	RI	+				
AN	RI			-		
MN	RI	+				
AN	ME	+				
GN	D		+			
AN	AE	+				
VN	CP			-		+
MN	LfH	-				

Note: W = Condition (Self-affirmation vs Control), Z_1 = Agentic vs Communal Stressor, Z_2 = Agentic + Communal vs External Stressor, A = Agentic, C = Communal Stressor, E = External Stressor, GN = Grandiose Narcissism, AN = Adaptive Narcissism, MN = Maladaptive Narcissism, VN = Vulnerable Narcissism, RI = Risky Ingestion, ME = Mental Escapism, D = Downplaying, AE = Active Escapism, CP = Considering Perspective, LfH = Looking for Help + = positive effect, - = negative effect.

There were positive interaction effects of narcissism and condition (self-affirmation vs control), irrespective of type of stressor, for the effects on risky ingestion (for grandiose and vulnerable narcissism), and mental and active escapism (for adaptive narcissists). Thus, being self-affirmed (versus not) was linked to an increased use of risky ingestion in grandiose and maladaptive narcissists; as well as being linked to an increased use of mental and active escapism for adaptive narcissists. Furthermore, a negative interaction effect was found for the effect of maladaptive narcissism and condition on use of looking for help, meaning that irrespective of type of stressor, there was a reduction in use of looking for help by maladaptive narcissists.

There was one interaction effect between narcissism and Z_1. This positive interaction effect indicated that use of downplaying for grandiose narcissists was higher in the control-agentic condition, compared to the control-communal condition.

There were two negative interaction effects between narcissism and Z_2, indicating that use of risky ingestion by adaptive narcissists, and considering perspective by vulnerable narcissists, was higher in the control-external condition, compared to the combined effect of control-agentic and control-communal condition; as well as for

There was one positive interaction effect between vulnerable narcissism, condition, and type of stressor. Thus, the use of considering perspective by vulnerable narcissists was higher in the self-affirmation-agentic and communal condition versus the self-affirmation-external condition, compared to the control-agentic, control-communal, and control-external condition.

4.5 Discussion

The aims of this study were to replicate the findings of Studies 1 and 2 and to expand upon these prior studies. More specifically, I sought to find additional evidence for differences between subtypes of narcissism, and their motivations to use different coping styles in times of stress. Furthermore, I examined how a self-affirmation manipulation

would affect use of coping styles in times of stress [using a hypothetical stressor]; and explore whether type of stressor had an effect on these findings.

4.5.1 Replicability of Previous Findings Using A Hypothetical Scenario

When exploring use of social support in times of stress, I found in this study (similar to Study 1 and Study 2), that grandiose narcissists perceived asking for support as an opportunity to exploit others. Additionally, in this study, I found evidence that grandiose narcissists perceive social support as healthy, and as available (similar to Study 2), and not as a weakness (contradicting findings from Hepper et al., 2011). Whereas in Study 1 I found evidence that perceiving support as weakness, healthy, available, and an opportunity to exploit others were associated with greater use of social support, in Study 2, only perceived availability of social support was related to more use of it. In this study, I found evidence that social support seeking increased when perceived as available, healthy, and an opportunity to exploit. There was no significant effect from perceiving it as a weakness to actual support seeking. This pattern of findings increased support seeking via the perception that it is available is also in line with much previous research (Hepper et al., 2011).

4.5.2 Type of Narcissism Predicts Coping Strategies

Similar to Study 1 and 2, this study provided evidence that grandiose, adaptive, maladaptive, and vulnerable narcissists, use different coping strategies in times of stress. Specifically, the contradictory findings for adaptive and maladaptive narcissists are striking, as well as the similarity between maladaptive and vulnerable narcissism in some aspects. For example, adaptive narcissists use less risky ingestion, mental escapism, and anger/aggression in times of stress, whereas maladaptive and vulnerable narcissists are found to use these harmful strategies more in times of stress. This is in line with previous research (Barry et al., 2007; Back et al., 2010; Hepper et al., 2014).

Even though I did not test in this research what the inter- and intrapersonal consequences of these behaviours are, I can assume this might influence their social networks. However, I did test the underlying motivations that predict use of coping strategies and found that, depending on type of narcissism, there were differences in motivations for coping styles usage. All types of narcissism were linked to behavioural avoidance, behaviour approach, impulsivity, self-enhancement, self-protection and optimism, and in turn most of these motivations were linked with use of different coping strategies. For example, when explaining use of anger/aggression in times of stress, impulsivity and self-protection were indirectly linked to a decrease in use of this coping strategy in adaptive narcissists. These same motivations were linked with an increase in use of this coping style in maladaptive and vulnerable narcissists. Furthermore, in grandiose narcissists, there was only a significant indirect effect via self-protection.

4.5.3 Self-Affirmation and Coping

I was not only interested in the motivations that predicted using, or not using, specific coping strategies by narcissists, but was also interested in the role self-affirmation could play in changing their use of coping strategies. Based on the theories on narcissism, I expected that a self-affirmation would be associated with an increase in using prosocial behaviours, and openness and responsiveness to others for all subtypes of narcissism (e.g., Campbell & Foster, 2007; Krizan & Herlache, 2018). Unfortunately, I found that irrespective of type of stressor (i.e., the moderated mediation models, paragraph 4.4.4) and motivations, following a self-affirmation manipulation, there were no changes in use of coping styles by vulnerable narcissists. Furthermore, grandiose narcissists increased their use of risky ingestion, compared to those that were not self-affirmed; meaning they dealt with stress by overeating and drinking. Exploring the breakdown into adaptive and maladaptive narcissism, I found that self-affirmed adaptive narcissists increased their use of risky ingestion, mental escapism, and active escapism, whereas self-affirmed

maladaptive narcissists increased their use of risky ingestion, and decreased their use of looking for help, compared to those not-affirmed. This means that self-affirmed adaptive narcissists were more prone to engaging in overeating and drinking, kept others from how bad things were, and tried to get away from the situation (either by sports or a holiday), and maladaptive narcissists who were self-affirmed dealt with stress by overeating and drinking, and reduced getting help from their faith or professionals.

These findings that grandiose, adaptive, and maladaptive narcissists engage in strategies that are unhealthy for themselves, and potentially isolating them from others (adaptive narcissists), were not in line with the expectation that being self-affirmed would buffer the negative effects of the stressful situation, which would reduce the use of harmful coping strategies and increase the use of helpful coping strategies. There is no evidence for a change in harmful coping strategies that would affect the relationships between narcissists and others. Further research should examine further the consequences to narcissists of adopting these strategies. However, these direct effects were irrespective of their motivations (i.e., indirect effects) for using each coping style.

4.5.3.1 Self-Affirmation and Motivations

Of the models testing the differences in indirect effects between narcissism and coping strategies, based on whether participants were self-affirmed or not, and not taking type of stressor into account, showed that it was possible to change narcissists' behaviour. More specifically, being self-affirmed was associated with to a decrease in use of risky ingestion for maladaptive and vulnerable narcissists via the motivation to self-protect. After self-affirmation (compared to the control group), narcissists were less likely to make themselves feel better by increasing eating, drinking, or drugs. Although not tested, this could lead to a reduction of negative consequences that are linked with substance abuse.

Furthermore, in the self-affirmation condition (compared to control condition), I found a decrease in adaptive narcissists' use of downplaying via behavioural inhibition. In

other words, adaptive narcissists were less likely to go on as if nothing happened, or refused to get too serious about it. Further research needs to confirm this, and pinpoint what this means for inter- and intrapersonal consequences for the adaptive narcissist.

4.5.3.2 Self-Affirmation, Type of Stressor, and Coping

Finally, I tested whether there was an interaction between narcissism, self-affirmation, and type of stressor that could change narcissists' use of coping strategies. I found that in 12 out of 36 models there was at least one effect of moderated moderated mediation via one of the motivations. Since I had three different stressors (agentic, communal, external), I had to dummy code them in order to check for differences. This means that these indices look at the differences between agentic and communal stressors, or the combined effect of agentic and communal stressors compared to external stressors. Looking at the breakdown of these moderated moderated mediations, and not focusing on the comparisons of differences between agentic and communal stressors, or the combined effect of agentic and communal stressors compared to external stressors within either control or self-affirmation conditions. Instead focusing solely on solely significant differences in indirect effects between the self-affirmation and control condition within people experiencing agentic or communal stressors (i.e., comparing control-agentic with self-affirmation-agentic, control-communal with self-affirmation-communal, and control-external with self-affirmation-external), I found that for vulnerable narcissists experiencing an *agentic* stressor, being self-affirmed (versus not) was associated with an increase in use of mental escapism (only via their optimism), and increase in use of looking for help (only via self-protection). For grandiose and maladaptive narcissists, being self-affirmed was linked to higher use of looking for help (only via self-protection), whereas for adaptive narcissism being self-affirmed was linked with lower use of looking for help (via self-protection). For grandiose and adaptive narcissists, being self-affirmed when experiencing a *communal* stressor was linked to a higher use of considering perspective (i.e., trying to

analyse the problem, or changing something about themselves), but only via self-enhancement. Finally, following an *external* stressor, vulnerable narcissists reduced their use of anger or aggression when self-affirmed, compared to those not self-affirmed, via their behavioural inhibition system. These findings suggest the effect of self-affirmation is not only linked to type of narcissism, but also to the type of stressor experienced, and only for some of the motivations. However, this is only a first exploration of the interaction between type of stressor, self-affirmation, and narcissism. Further research is needed to establish more coherent patterns between narcissism, motivations, coping, and possible interventions.

4.5.4 Limitations and Further Research

This study has a few limitations to overcome in future research. Firstly, the research was done online. Even though this can be seen as a limitation, this was done to increase the diversity of the sample: I collected a student sample, and a diverse other sample using identical methods, which meant that I could pool the data together and increase my sample size. Where there were differences between the two samples (students vs general other population), I included the source of the data as a covariate in the analyses.

Furthermore, to test whether self-affirmation could change narcissistic behaviour, a short term manipulation was used. My research showed that it is possible, and future research therefore can use the findings and expand upon them by focusing on those areas in a full intervention.

Additionally, due to the research design of this study, where the manipulation was short-term, and all measurements were taken at one timepoint, it was necessary to use vignettes (e.g., Ognibene & Collins, 1998). By exploring all stressors people had written down in the previous studies, and pilot testing the hypothetical stressors, I tried to ensure that the hypothetical stressors used were ones that most people could relate to. However,

they are still hypothetical and not actually experienced stressors. Future research can implement an intervention for a certain timeframe, and then later test the effects of this intervention by asking how people have dealt with stressful situations afterwards.

Even with the limitations described above, I managed to manipulate maladaptive and vulnerable narcissists' behaviour by reducing the use of risky ingestion as a coping style in times of stress, following a self-affirmation manipulation. Maladaptive and vulnerable narcissists in the manipulation condition significantly reduced the use of risky ingestion compared to those in the control condition, but only via the motive to self-protect. This implicates that even a short-term manipulation where people are self-affirmed had this positive outcome. Further research needs to focus on longer exposure to self-affirmation or other interventions to see whether the negative consequences of narcissist's behaviour can be curtailed.

Chapter 5 General Discussion

As highlighted in Chapter 1, the aim of this thesis was to integrate research on stress, coping, social support, and narcissism. Previous research had shown that narcissists were prone to stress (Rhodewalt & Morf, 1995; Edelstein et al., 2010), and more susceptible to experience more stressful life events (Orth & Luciano, 2015). However, there was a dearth of research on how narcissists cope with stress. Only one study had addressed whether narcissists used social support in times of stress (Hepper et al., 2011), and no studies had examined other coping styles.

I expanded on this prior research in several ways. Firstly, I implicated four subtypes of narcissism (i.e., grandiose, adaptive, maladaptive, and vulnerable) to explain the use of social support in times of stress (Study 1-3). Secondly, I explored other coping strategies narcissists used in times of stress (Study 1), and identified potential mechanisms that accounted for use of these coping styles (Study 2-3). Thirdly, I tested whether a self-affirmation manipulation could change narcissistic behaviour (Study 3). I tested this via range of study designs, and assessed reactions to retrospectively recalled, daily, and hypothetical stressors. Throughout this thesis, I also tested whether the use of each coping style was influenced by type of stressor experienced (i.e., agentic, communal, or external).

5.1.1 Summary of the findings

I conducted a programmatic series of three studies. In Study 1 (Chapter 2), I tested how narcissists cope with stressful situations, and examined motivations for narcissists to (not) use social support. Furthermore, I attempted to identify other coping strategies use, and whether type of stressor influenced use of the coping strategies.

In Study 2 (Chapter 3), I sought to replicate the social-support findings of Study 1, and to identify other underlying motivations that could explain narcissists' use of other

coping strategies. Furthermore, I tested whether coping with stress fluctuates over time, and the impact of this on psychological well-being.

In Study 3 (Chapter 4), I attempted to see if I could use a self-affirmation manipulation to change narcissists' behaviours in times of stress, and used a control condition to replicate the findings of Studies 1-2.

5.1.1.1 Do Narcissists Use Social Support in Times of Stress? And What Are The Mechanisms Through Which They Use Social Support?

Despite lacking communion (Campbell & Foster, 2002; Rhodewalt & Morf, 1995), grandiose narcissists do use social support in times of stress. Specifically, compared to low-narcissists they reported greater retrospective use of emotional and esteem support (Study 1). However, no significant difference between high- and low-narcissists in social support seeking was found in everyday diary entries (Study 2) and hypothetical scenarios (Study 3). Moreover, there were several positive indirect effects across studies, indicating that particular mechanisms influence-narcissists' behaviour to seeking social support. The reasons for which they do, depend on the type of narcissism.

5.1.1.1.1 Narcissism and Perceptions of Social Support

Some of the findings were consistent and other inconsistent across studies. In all studies, the most consistent findings pertained to the direct effects from narcissism to each motivation. In all studies, grandiose narcissists perceived support-seeking as an opportunity to exploit others. This was driven by the maladaptive component. In addition, Studies 2 and 3, grandiose narcissists' perceived support as available, and in Study 3, narcissists did not perceive support as a weakness, and perceived asking for it as healthy. Across studies, adaptive narcissists did not view asking for support as a weakness, and did see it as available. Furthermore, in Studies 1 and 3, adaptive narcissists perceived asking for support as healthy. In Study 3, adaptive narcissists did not perceive asking for support as an opportunity to exploit others. Across studies, maladaptive narcissists perceived

support as a weakness and an opportunity to exploit others, and, in Study 1, they did not perceive support as available. Finally, across studies vulnerable narcissists perceived asking for support as a weakness, and an opportunity to exploit others, but not as healthy or available. Moreover, across studies, perceived availability of social support was linked to greater use of social support. Perceiving using support as an opportunity to exploit others, and as healthy, was associated with an increase in use of social support, but only in Studies 1 and 3.

5.1.1.1.2 Indirect Pathways from Narcissism to Social Support

In Study 1, grandiose narcissism was associated with using social support to cope with a past stressful event, but only via the perception that it was an opportunity to exploit other people. This finding was driven by maladaptive narcissism. Interestingly, despite seeing it as unavailable and a weakness, maladaptive narcissist used social support. Contrastingly, adaptive narcissists used social support because they identified it as healthy and available. Finally, vulnerable narcissists used social support because they perceived it as an opportunity to exploit others, despite perceiving it as weak, unhealthy, and unavailable. Furthermore, the indirect pathways for different subtypes of social support (emotional, informational, esteem, and instrumental) were quite similar. Therefore, for subsequent studies, I decided to only look at overall social support.

In Study 2, the only mechanism that explained use of social support was whether or not narcissists deemed support as available. Grandiose and adaptive narcissists identified support as available, and therefore used it. Vulnerable narcissists did not see support as available, and therefore decreased their use of it.

In Study 3, grandiose narcissism was associated with using social support to cope with a past stressful event, but only via the perception that it was an opportunity to exploit other people, and they perceived it as being available. Exploiting others was driven by maladaptive components, whereas using it because it is perceived as available was driven

by adaptive components of narcissism. Furthermore, adaptive narcissists used support because they identified it as healthy. Finally, vulnerable narcissists used social support, despite seeing it as unhealthy and unavailable, because they saw it as an opportunity to exploit others.

Across studies, similarities and differences emerged regarding narcissists' use of social support. Study 2 produced fewer significant results than the other two studies. More specifically, there were no indirect effects via the perception that it is an opportunity exploit others, instead, only perceived availability of social support was linked to an increase in use of social support in grandiose and adaptive narcissists, and a decrease in vulnerable narcissists. One explanation is perhaps due to the use of repeated measures. In Study 2, participants generated a most stressful situation for four times, within the last three days. Over the course of the research, the perceived stress level of these situations dropped from a score of 6.41 to 5.88 out of a maximum of 8. This may have weakened the findings of this study.

5.1.1.2 What Other Coping Strategies Do Narcissists Use in Times of Stress?

In Study 1, I assessed the full range of coping strategies considered dominant in the literature. I then used Bootstrapped Factor Analysis, and identified ten coping styles that can be used in times of stress: Emotional and esteem support, informational and instrumental support, risky ingestion, planful problem solving, mental escapism, downplaying, anger/aggression, active escapism, considering perspective, and looking for (spiritual) help. Two of these coping strategies were types of social support, so I decided not to separate them any further, but instead focused on overall social support, as described above. Here, I focus on the eight 'other' coping styles that were identified.

Across all three studies (Study 1, Study 2, Study 3 – control condition) I found evidence that grandiose narcissists were more likely to use planful problem solving and were looking for more help. The adaptive components of narcissism explained the planful

problem solving across all three studies. Furthermore, in Study 3, I also found evidence that the adaptive components of narcissism explained looking for help. Contrastingly, in Study 1, the maladaptive components of narcissism explained looking for help.

In Study 1, I found evidence that grandiose narcissism was linked to an increase in risky ingestion and anger/aggression, which was explained by their maladaptive components. For maladaptive narcissism this finding was replicated in Study 3, where additionally, there was a negative link between adaptive narcissism and risky ingestion and anger/aggression.

These contrasting findings between adaptive and maladaptive components of narcissism and use of coping strategies were also found in Studies 2 and 3 when examining the link with mental escapism. Where maladaptive narcissism predicted more mental escapism, adaptive narcissism predicted less mental escapism.

Furthermore, I found evidence that grandiose narcissism was linked with more active escapism (Studies 1 and 3) and downplaying (Studies 1 and 2), but neither adaptive nor maladaptive components explained this. Which means that these findings might be explained by the narcissistic components that are not used in this breakdown, i.e., superiority or vanity.

Across all three studies, I found evidence that vulnerable narcissism was associated with an increase in risky ingestion, and mental escapism, and a decrease in planful problem solving. Furthermore, in Studies 1 and 2, I found evidence that vulnerable narcissism was associated with an increase in anger/aggression, and only in Study 3, there was some evidence that vulnerable narcissism was associated with a decrease in downplaying.

Finally, across studies, I found no evidence that any type of narcissism was linked to considering perspective, nor that grandiose narcissism was linked to mental escapism, adaptive narcissism was linked to downplaying or active escapism, maladaptive narcissism

to planful problem solving, downplaying, or active escapism, or vulnerable narcissism was linked to active escapism or looking for help.

5.1.1.2.1 What Are The Mechanisms Through Which Coping Style Usage Can Be Explained?

Based on previous research, Study 2 and 3 measured several mediators that were theoretically plausible mechanisms to explain use of the eight other coping styles identified in Study 1: Behavioural Inhibition System (BIS), Behavioural Activation System (BAS), Impulsivity, Self-Enhancement, Self-Protection, Optimism, and Locus of Control. As explained in Chapter 3 (Study 2), not all these mediators were used to explain all coping styles. Inclusion into models was based on findings from previous literature. Furthermore, based on the results of Study 2, in Study 3, I excluded Locus of Control from the study-design. When comparing across Studies 2 and 3 below, I have focused on the control condition of Study 3, not the self-affirmation condition.

5.1.1.2.1.1 Direct Effects from Narcissism to Mediators

In both studies, I found that most of the direct paths in the mediation models were identical in direction. In both studies, grandiose narcissism was linked to less behavioural inhibition, and more behavioural approach, self-enhancement, self-protection, and optimism. Furthermore, in Study 2, grandiose narcissism was linked to less impulsivity, less external locus of control, and more internal locus of control.

These links were explained by both adaptive and maladaptive components of narcissism. Across both studies, adaptive components of narcissism explained the links with less behavioural inhibition, and more self-enhancement (in Study 2, also explained by maladaptive components of narcissism) and optimism, whereas maladaptive components of narcissism explained the links with behavioural approach, and self-protection. Furthermore, in Study 2, adaptive components of narcissism explained the links between grandiose narcissism and less impulsivity (not in study 3), and less external locus of

control and more internal locus of control. Furthermore, there were some instances where adaptive and maladaptive components of narcissism showed contradictory links with these motivations, which meant that for grandiose narcissism the links were cancelled out. For example, despite maladaptive components of narcissism being linked to higher external locus of control (in Study 2), greater behavioural inhibition (both studies), increased impulsivity (both studies), and less optimism (Study 3), the adaptive components were stronger and explained the links between grandiose narcissism and these motivation.

Across both studies, vulnerable narcissism was associated with an increase in behavioural inhibition, impulsivity, and self-protection, and a decrease in optimism. Furthermore, in Study 2, I found evidence that vulnerable narcissism was associated with a decrease in self-enhancement and internal locus of control, and an increase in external locus of control.

5.1.1.2.1.2 Indirect Pathways from Narcissism to Coping Strategies Via Motivations

Across Studies 2 and 3, I found indirect effects explaining the use of coping strategies via different motivations. The differences in indirect effects I found across the two studies were minimal. Behavioural inhibition, self-enhancement and self-protection were the motivations that had the most consistent significant indirect effects influencing the different coping strategies in both studies.

5.1.1.3 Narcissists' Well-Being

In Study 2, I tested whether narcissists' change in well-being was affected by their use of different coping styles over a two-week time period. I found only evidence for a change in depression in this two-week time period such that participants were less depressed at the end of the two week period than at the start. However, when using all the coping strategies as mediators, there were no indirect effects via any of these mediators on this change in depression. Therefore this study found no evidence that narcissists' wellbeing is impacted by the coping strategies adopted.

5.1.1.4 Can A Narcissists' Behaviour Change Through Self-Affirmation?

In Study 3, I tested whether narcissists' behaviour can change through self-affirmation. In this study, I used a short-term manipulation to test the effects of narcissism on all coping strategies, and found that it is possible to change people's use of different coping strategies in response to self-affirmation. I found evidence for changing maladaptive and vulnerable narcissists' use of risky ingestion in at least the short-term. However, further research is required to gather more evidence if this is also possible in the long-term.

5.1.1.5 Does Type of Stressor Matter?

Following a classification into different types of stressors by O'Brien and DeLongis (1996), I was interested in exploring differences in coping following agentic, communal, and external stressors. I expected that narcissists would find agentic stressors to be more threatening than other type of stressors, and tested this in Studies 1 and 3.

In these two studies, there was no conclusive evidence that type of stressor influenced use of social support in times of stress (Study 1 and 3). Furthermore, I found only a small amount of evidence that type of stressor moderated the use of other coping strategies. In Study 1, I only found significant evidence of moderation in the use of downplaying by grandiose narcissists, which was explained by their adaptive components. Grandiose narcissism was linked positively with use of downplaying, but only in the communal and external stressor conditions, and not when experiencing an agentic stressor. Adaptive narcissism was linked positively with the use of downplaying, but only when experiencing a communal stressor, and not when experiencing an agentic or external stressor. In Study 3, there were also some effects of type of stressor, however, these effects were not as clear-cut as in Study 1, as they interacted with the condition (self-affirmation vs. control), as well is with narcissism.

5.1.2 Implications of These Findings

5.1.2.1 Theoretical Development

The findings have implications for theory development in narcissism, stress, and self-affirmation research.

5.1.2.1.1 Narcissism

Two classic dominant models of narcissism are the Extended Agency Model (Campbell & Foster, 2007), and the dynamic self-regulatory processing model (Morf & Rhodewalt, 2001). At the core of these models are the narcissistic motivations that drive their behaviours: high agency and low communion. This is the framework on which my thesis and studies are built. However, these theories themselves suffer limitations. For example, the Extended Agency Model only focused on grandiose narcissism, and the dynamic self-regulatory processing model conceptualised narcissism as both grandiose and vulnerable, but failed to distinguish between them.

The recent Distinctiveness Model of the Narcissistic Subtypes (Freis, 2018) focused on the similarities and differences between grandiose and vulnerable narcissism. The model states that grandiose narcissists are more promotion focused in their need for distinctiveness, and view outcomes where there is status quo (i.e., everything stayed the same) as negative. Vulnerable narcissists, on the other hand, are more prevention focused, and view outcomes with status quo as positive because they do not lose anything. I focused on approach and avoidance strategies in coping with stressful situations, and found that grandiose narcissists were more approach focused, and less prevention focused, whereas vulnerable narcissists were more prevention focused (Study 2 and 3).

Another framework that could be used is the three-factor framework of narcissism, focussing on agentic, antagonistic, and neurotic components of narcissism (e.g., Back & Morf, 2017; Krizan & Herlache, 2018; Miller et al., 2016). In this thesis, I have found evidence that supports the ongoing discussions about distinctions between different types

of narcissism (e.g., Weiss & Miller, 2018, explaining grandiose and vulnerable narcissism, and narcissistic personality disorder; Cai & Luo, 2018, explaining adaptive vs maladaptive narcissism; Weiss et al., 2019, explaining the role of antagonism, agentic extraversion, and neuroticism within narcissism). Throughout the thesis, I have demonstated how these different conceptualisations are entangled with one another (see Figure 1.1, page 15).

The subcomponents within grandiose narcissism are important in understanding narcissists' behaviour. Sometimes adaptive components, and sometimes maladaptive components explain this behaviour. A recent chapter by Cai and Luo (2018) states different domains in which adaptive and maladaptive narcissists show distinctive behaviours. They also highlight that the majority of research into narcissism has solely focused on grandiose narcissism as a singular construct, rather than the breakdown into adaptive and maladaptive components, which means that two people scoring moderately on grandiose narcissism may be very different. As outlined throughout this thesis, previous research on narcissism identified correlations between narcissism and behavioural motivations (e.g., behavioural approach, behavioural avoidance, impulsivity), and the coping literature has explored links between these behavioural motivations and coping strategies. This is the first time this has been brought together. In all studies, I found that maladaptive narcissists used more harmful behaviours (i.e., risky ingestion, anger/aggression), whereas adaptive narcissists used more helpful behaviours (i.e., planful problem solving). However, adaptive and maladaptive components of narcissism usually coexist. Indeed, across all studies, I found evidence that these components are correlated but distinguishable.

These findings are also in line with the recent conceptualisation of narcissism into three different components: agentic extraversion, antagonism, and neuroticism (e.g., Back & Morf, 2017; Krizan & Herlache, 2018; Miller et al., 2016; Weiss et al., 2019), I found further evidence that a two-dimensional model of narcissism (i.e., grandiose and vulnerable narcissism), might not be sufficient. Although these three-factor models do not directly

refer to adaptive and maladaptive components of grandiose narcissism, they do indirectly use the conceptualisation. In this three-factor conceptualisation, antagonism (i.e., self-importance/entitlement; mainly components of maladaptive narcissism) is the core feature that overlaps with agentic extraversion (grandiose narcissism, mainly adaptive narcissism) as well as neuroticism (vulnerable narcissism). My research confirms the overlapping features of these two- and three-factor models as depicted in Figure 1.1 (Chapter 1, page 15). In several instances throughout my research I found similarities and differences between different subtypes of narcissism that could be mapped onto this framework. For example, similarities between grandiose, maladaptive, and vulnerable narcissism on use of social support, such as significant positive indirect effects via the perception that asking support is an opportunity to exploit others (Study 1 and Study 3), could be explained by the antagonistic aspects of narcissism that are related to these types of narcissism. Additionally, the findings across the three studies that grandiose and adaptive narcissism were associated with an increase in planful problem solving in times of stress, whereas vulnerable narcissism was associated with a decrease in planful problem solving, and maladaptive narcissism was not associated with this, could indicate that use of this coping style was influenced positively by agentic extraversion, and negatively by neuroticism, showing the distinct differences for grandiose and adaptive narcissism, compared with vulnerable narcissism. The finding that there were no significant associations between maladaptive narcissism and planful problem solving, could indicate that use of this coping style is not associated with antagonistic aspects of narcissism. However, this is speculative, and further research is necessary to verify this, before drawing conclusions." In line with the narcissistic personality being high in agency and low in communion (Campbell & Foster, 2002; Rhodewalt & Morf, 1995), I decided to examine the potential influence of agentic, communal, and external stressors (O'Brien & DeLongis, 1996) on use of, and reasons for using, various coping strategies. Even though I failed to find conclusive

evidence for differences in coping strategies depending on type of stressor experienced (agentic, communal, external), this was the first body of research investigating both helpful and harmful coping strategies used by grandiose, adaptive, maladaptive, and vulnerable narcissists in times of stress.

5.1.2.1.2 Stress and Coping With Stress

In the introduction of this thesis, I highlighted the transactional model of stress and coping (Lazarus & Folkman, 1984). One of the key elements of this model is the appraisal people make about how they can cope with a stressor. Where Lazarus and Folkman (1984) mainly focused on differences between the overarching classifications of emotion-focused and problem-focused coping, following Skinner and colleagues (2003), I focused on lower order classifications (e.g., risky ingestion, planful problem solving), to answer how narcissists deal with stressful situations. I did this by using bootstrapped factor analyses to create the overarching classifications of coping strategies, and therefore add to the literature. Furthermore, in this factor analyses, I found evidence that the classification into four subtypes of social support is not as relevant as it seemed. This was further corroborated by the Study 1 findings where there were only minimal differences in the motivations for using different subtypes, and these differences were only in the significant level, not the direction of the findings.

Finally, in this research I not only focused on what kind of coping strategies people used, I linked it to their personality (narcissism), as well as to their motivations as to why they decided to use or not use these coping styles.

5.1.2.1.3 Self-Affirmation

The results of Study 3 provided evidence that even a short-term manipulation can lead to less use of risky ingestion by maladaptive and vulnerable narcissists in terms of stress. This finding is partially in line with the findings by Thomaes et al. (2009), who found that a self-affirmation task could lead (over time) to a reduction of aggression in

high narcissistic 12-15 year olds. Thomaes et al.'s research found evidence that they could change grandiose narcissists' use of aggression over time; I found evidence for changing maladaptive and vulnerable narcissists use of risky ingestion (irrespective of type of stressor experienced) in short-term. Self-affirmation, it seems, can be used for changing narcissists behaviours both in the short-term and long-term. Therefore, further research is required to test whether a reduction of harmful coping strategies can me maintained over a longer time period.

5.1.2.2 Practical Development

How narcissists cope with stress has important intra- and interpersonal consequences that could potentially lead to negative outcomes for the narcissist, those close to the narcissist, and even society as a whole. Despite not finding evidence for effects of use of different coping strategies on well-being in Study 2, an increase in the use of risky ingestion (i.e., overeating/drinking/substance abuse), could very well lead to health issues for the narcissists in the long term (intrapersonal consequences). Further research on this is needed to test the robustness of this finding.

The use of drugs/alcohol, a harmful coping strategy, may in turn lead to more stress. This additional stress may then trigger the need to use other coping strategies that may be more detrimental for the people around them (interpersonal consequences), such as aggression towards others. Both these intra- and interpersonal consequences could lead to greater costs for society, for example, in terms of healthcare or judicial costs. Albeit just one example, this shows how many people can benefit from knowing how narcissists react to stressors. Interventions, such as self-affirmation based techniques, which can reduce the use of harmful coping strategies, such as risky ingestion, or anger/aggression, and increase the more helpful ones, such as considering perspective or planful problem solving, can be helpful to minimise negative consequences.

5.1.3 Strengths, Limitations and Future Research

5.1.3.1 Methodological Limitations and Strengths

This research had a few methodological limitations and strengths that might influence the generalisability of these studies. Firstly, all the studies were conducted online. Online samples were necessary to obtain decent to large sample sizes, especially for Study 2. Even though online samples are sometimes classified as having less control than lab-based research methods, I tried to maximise control by including instructional manipulation checks in in all studies (Oppenheimer et al., 2009). Future research should try to replicate these findings in a lab setting. Having online studies further meant that I had diverse samples compared to other psychological studies on narcissism using mainly student-samples, or WEIRD samples (i.e., White, Educated, Industrialized, Rich, and Democratic; Henrich, Heine, & Norenzayan, 2010). In Study 3, both a student sample and a more generic sample were included and differences between them were taken into consideration. Furthermore, these three studies had people ranging from 18-74 years, with a variety of ethnic backgrounds, education backgrounds, and working disciplines.

In the three studies, I used a variety of methodologies, including a simple between-participants experimental design with a recalled stressor (Study 1), a diary design with repeated measures and recalled stressors for each subject (Study 2), and a between-participants experimental design with manipulation and use of hypothetical stressors (Study 3). By doing so, I hoped to show that my findings were robust and replicated, regardless of method used.

Related to this, I have used different forms of mediation analysis (i.e., mediation, moderated mediation, and/or moderated moderated mediation analyses) on cross-sectional data. This limits the extent to which causation can be inferred. Although there are researchers that are against using mediational analysis on cross-sectional data (e.g., Maxwell, Cole, & Mitchell, 2011; Trafimow, 2015), other researchers advocate that

causality is not a problem of statistical methodology, but of research design and logical analysis (e.g., Hayes, 2018). Related to this research, previous research has identified that personality traits are considered to be relatively stable over time (e.g., McCrae & Costa, 1994); how narcissism is linked to strategies such as self-enhancement, self-protection, and impulsivity (e.g., Hepper, Gramzow, & Sedikides, 2010; Jones & Paulhus, 2011); how these strategies are linked with coping (e.g., Bonanno et al, 2002; Cyders, 2013); and finally how stressors emerge, and how that influences the use of coping strategies (e.g., the transactional model of stress; Lazarus & Cohen, 1977; Lazarus & Folkman, 1984). This gives confidence that narcissism predicts motivations, which predicts use of coping styles, and not coping styles that predicts motivations and/or level of narcissism. However, longitudinal research should verify the causal directions as described here.

Furthermore, the sample size of my studies, Study 1: N=394, Study 2: N=190, Study 3: N=735, might be deemed insufficient for obtaining sufficiently high power for some of the complex analyses. However, this research is the first to show differences in motivations and coping styles for different subtypes of narcissism (Studies 1-3). This research indicated that use of a coping style, sometimes depended solely on a subtype of narcissism (Studies 1-3) and sometimes on an interaction between narcissism and type of stressor (Study 1 and Study 3). Even if the sample sizes per study are deemed too low, the consistent significant findings across the studies should indicate that they are more than just due to chance. In particular, the complexity of the moderated mediation and moderated moderated mediation models used in Study 3 could arguably be seen as requiring a larger sample size.

In all three studies I relied on self-report measures for all social support, coping and motivational measures. There are reasons why self-report measures might not be accurate due to poor self-insights (Grijalva & Zhang, 2016), recall bias (Althubaiti, 2016), or social

desirability (Hart, Ritchie, Hepper, & Gebauer, 2015). Future research could try to assess behaviours using an observational design.

Finally, across the three studies, I used the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988) to measure grandiose, adaptive, and maladaptive narcissism; and the HyperSensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997) to measure vulnerable narcissism. As with the two scales I adopted, most narcissism measures only focus on either grandiose narcissism or vulnerable narcissism. The reason for choosing the NPI and HSNS over other models, such as the Five Factor Narcissism Inventory (FFNI; Glover et al., 2012) or the Pathological Narcissism Inventory (PNI; Pincus et al., 2009) was that I was not only interested in the difference between grandiose and vulnerable narcissism, but also in the differences between adaptive and maladaptive components of narcissism. Furthermore, despite new grandiose narcissism measures being developed in the last few years (e.g., Narcissistic Admiration and Rivalry Questionnaire [Back et al., 2013], Single Item Narcissism Scale [Konrath et al., 2014], and Grandiose Narcissism Scale [Foster et al., 2015]), I deemed it most appropriate to focus on two of the more established scales. To include all measures would have overburdened the participants, but with the growing literature on narcissism, future research might incorporate these other measures of narcissism as well, to explore whether further nuances are revealed with these measures.

This research explored use of different coping styles, and motivations for using them. It successfully demonstrated one way in which narcissists' behaviour can be changed: using self-affirmation. More specifically, this research found evidence that it is possible to change narcissists behaviour using self-affirmation in the short-term, but failed to investigate whether it is possible to change their behaviour long-term. Further research should explore this. Furthermore, future research can explore whether other manipulations can change narcissists behaviour as well. Recent research has shown that increasing

communal orientation in narcissists might have positive effects (e.g., Finkel et al., 2009; Hepper et al., 2014; Kopp & Jordan, 2013). Could an intervention with a focus on communal orientation lead to a decrease in maladaptive components of narcissism? Further research should explore these options.

5.1.3.2 Future Research

To summarise, future research should try to replicate and expand upon the current research. The recommendations for further research could encompass, but are not limited to: keep exploring differences and similarities between grandiose, adaptive, maladaptive, and vulnerable narcissism (whilst using different measures); use diverse samples; use a laboratory setting; include more motivations that could explain coping styles; and/or explore what can explain the change in wellbeing in narcissists. Furthermore, after establishing a coherent pattern, a manipulation or long-term intervention could focus on increasing helpful coping styles, and reducing harmful coping styles; whilst improving psychological wellbeing.

5.1.4 Concluding Remarks

This research was the first to address how narcissists cope with stress when experiencing (different type of) stressful situations, and it's results are promising. The research focussed on types of narcissism and illustrated that these types use different types of coping strategies for different reasons. Finally, the research demonstrated that it is possible to change narcissists' coping styles in the short term via a self-affirmation manipulation.

Appendix A Tables

Table A2.1
Descriptive Statistics for the Questionnaire Measures

Measure	*Total*				
	M	*SD*	Cronbach's α	Skew-ness (SE = .12)	Kurto-sis (SE = .25)
NPI	12.05	8.57	.92	.60	-.45
NPI: Adaptive Narcissism	5.65	3.88	.85	.48	-.76
NPI: Maladaptive narcissism	4.15	3.68	.83	.91	.15
HSNS	4.10	.07	.85	-.07	-.31
Seeking Support - Total	3.92	1.84	.94	.00	-.93
Seek Emotional Support	4.27	2.21	.93	.04	-1.18
Seek Informational Support	4.22	2.20	.93	-.10	-1.22
Seek Instrumental Support	3.66	1.91	.85	.24	-.83
Seek Esteem Support	3.52	1.98	.88	.32	-.91
PASS	5.26	1.79	.94	-.46	-.54
Perception - Weakness	3.62	1.67	.87	.48	-.57
Perception - Exploitation	2.77	1.40	.67	.64	-.17
Perception - Healthy	4.98	1.91	.88	-.33	-.70

Note. $N = 394$. NPI = Narcissistic Personality Inventory; HSNS = Hypersensitive Narcissism Scale

Table A2.2

Correlations between NPI, Social Support-Seeking (and Subscales), Perceived Availability of Social Support, and perceptions towards support.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1. NPI	1												
2. Adaptive	.89***	1											
3. Maladaptive	.90***	.66***	1										
4. HSNS	.02	-.11*	.14**	1									
5. SSS Total	.18***	.15**	.12**	.01	1								
6. SSS Emo	.12*	.12*	.07	-.03	.90***	1							
7. SSS Info	.08	.09	.02	-.01	.89***	.71***	1						
8. SSS Inst	.18***	.13**	.14**	.02	.87***	.65***	.77***	1					
9. SSS Est	.25***	.19***	.21***	.05	.88***	.79***	.67***	.67***	1				
10. PASS	.04	.10*	-.06	-.23***	.50***	.50***	.47***	.38***	.41***	1			
11. Perc Weak	.05	-.02	.12*	.41***	-.12*	-.19***	-.17***	-.05	.00	-.52***	1		
12. Perc Exploit	.39***	.25***	.43***	.25***	.36***	.24***	.24***	.36***	.47***	.04	.35***	1	
13. Perc Health	.07	.09	-.01	-.15**	.57***	.56***	.54***	.48***	.46***	.62***	-.57***	.29***	1

Note. NPI = Grandiose Narcissism, Adaptive = Adaptive Narcissism, Maladaptive = Maladaptive Narcissism, HSNS = Vulnerable Narcissism, SSS Total = Seeking Social Support – Total Score, SSS Emo = Seeking Emotional Social Support, SSS Info = Seeking Informational Social Support, SSS Inst = Seeking Instrumental Social Support, SSS Est = Seeking Esteem Social Support, PASS = Perceived Availability of Social Support, Perc Weak = Perception that asking social support is a weakness, Perc Expl = Perception that asking social support is an opportunity to manipulate and exploit others, Perc Health = Perception that seeking social support is natural and healthy. *$p < .05$, **$p < .01$, ***$p < .001$

Table A2.3
Mediation of the Effect of Narcissism on Social Support-Seeking through Perceptions and Availability

		Bootstrapping	
		BC 95% CI	
Mediators	Point Estimate	Lower	Upper
Weakness	0.00	-0.06	0.06
Exploit	0.94	0.58	1.34
Healthy	0.21	-0.11	0.55
PASS	0.08	-0.13	0.29
TOTAL	1.23	0.62	1.85
Total effect (c)	1.50	0.66	2.34
Direct effect (c')	0.27	-0.40	0.94

$R^2 = .4738$, $F(5,388) = 69.86$, $p < .001$

Note. 10,000 bootstrap samples. For the indirect effect tests, significant mediation is evidenced by confidence intervals that do not include zero.

Table A2.4
Mediation of the Effect of Narcissism on Subtypes of Social Support-Seeking through Perceptions and Availability

Dependent Variable	Mediators	Point Estimate	Bootstrapping BC 95% CI Lower	Upper
		Indirect Effects		
Emotional Social Support Seeking	Weakness	0.00	-0.07	0.07
	Exploit	0.66	0.28	1.09
	Healthy	0.26	-0.14	0.68
	PASS	0.10	-0.16	0.36
	TOTAL	1.02	0.31	1.74
	Total effect (c)	1.25	0.23	2.27
	Direct effect (c')	0.23	-0.64	1.10
		$R^2 = .3911$, $F(5,388) = 49.85$, $p < .001$		
		Indirect Effects		
Informational Social Support Seeking	Weakness	0.00	-0.07	0.07
	Exploit	0.76	0.38	1.21
	Healthy	0.25	-0.14	0.65
	PASS	0.08	-0.14	0.32
	TOTAL	1.10	0.40	1.80
	Total effect (c)	0.83	-0.19	1.84
	Direct effect (c')	-0.27	-1.15	0.61
		$R^2 = .3678$, $F(5,388) = 45.14$, $p < .001$		

Table A2.4 (continued)

		Indirect Effects		
Instrumental	Weakness	0.00	-0.06	0.06
Social	**Exploit**	0.94	0.56	1.37
Support	Healthy	0.20	-0.10	0.51
Seeking	PASS	0.04	-0.08	0.19
	TOTAL	1.17	0.61	1.74
	Total effect (c)	1.61	0.73	2.48
	Direct effect (c')	0.43	-0.36	1.22

$R^2 = .3348$, $F(5,388) = 39.06$, $p < .001$

		Indirect Effects		
Esteem	Weakness	-0.01	-0.10	0.07
Social	**Exploit**	1.40	0.95	1.91
Support	Healthy	0.14	-0.07	0.40
Seeking	PASS	0.08	-0.14	0.31
	TOTAL	1.62	1.00	2.25
	Total effect (c)	2.33	1.44	3.21
	Direct effect (c')	0.71	-0.03	1.44

$R^2 = .4525$, $F(5,388) = 64.14$, $p < .001$

Note. 10,000 bootstrap samples. For the indirect effect tests, significant mediation is evidenced by confidence intervals that do not include zero.

Table A2.5
Mediation of the Effect of Adaptive Narcissism on Social Support-Seeking through Perceptions and Availability (Whilst Controlling for Maladaptive Narcissism).

Mediators	Point Estimate	Bootstrapping BC 95% CI Lower	Bootstrapping BC 95% CI Upper
Weakness	-0.03	-0.17	0.11
Exploit	-0.11	-0.36	0.14
Healthy	0.43	0.12	0.78
PASS	0.37	0.15	0.65
TOTAL	0.67	0.10	1.24
Total effect (c)	0.81	-0.05	1.68
Direct effect (c')	0.15	-0.51	0.80
$R^2 = .4733$, $F\ (6,387) = 57.60$, $p < .001$			
		Contrasts	
Healthy vs PASS	0.06	-0.27	0.44

Note. 10,000 bootstrap samples. For the indirect effect tests, significant mediation is evidenced by confidence intervals that do not include zero. For the contrast, a confidence interval that does not include zero suggests that one indirect effect is significantly larger than the other.

Table A2.6

Mediation of the Effect of Adaptive Narcissism on Subtypes of Social Support-Seeking through Perceptions and Availability (Whilst Controlling for Maladaptive Narcissism).

Dependent Variable	Mediators	Point Estimate	Bootstrapping BC 95% CI Lower	Bootstrapping BC 95% CI Upper
		Indirect Effects		
Emotional Social Support Seeking	Weakness	-0.01	-0.19	0.18
	Exploit	-0.08	-0.27	0.10
	Healthy	0.53	0.15	0.97
	PASS	0.47	0.18	0.82
	TOTAL	0.91	0.27	1.57
	Total effect (c)	1.03	-0.01	2.08
	Direct effect (c')	0.12	-0.72	0.97
	$R^2 = .3910$, $F\ (6,387) = 41.41$, $p < .001$			
		Contrasts		
	Healthy vs PASS	0.06	-0.36	0.55
		Indirect Effects		
Informational Social Support Seeking	Weakness	0.00	-0.19	0.19
	Exploit	-0.09	-0.32	0.12
	Healthy	0.51	0.14	0.93
	PASS	0.39	0.13	0.73
	TOTAL	0.81	0.19	1.43
	Total effect (c)	1.10	0.05	2.14
	Direct effect (c')	0.29	-0.56	1.14
	$R^2 = .3701$, $F\ (6,387) = 37.89$, $p < .001$			
		Contrasts		
	Healthy vs PASS	0.11	-0.30	0.59

Table A2.6 (continued)

		Indirect Effects		
Instrumental	**Weakness**	-0.01	-0.17	0.16
Social	Exploit	-0.11	-0.35	0.14
Support	**Healthy**	0.40	0.11	0.75
Seeking	**PASS**	0.22	0.02	0.47
	TOTAL	0.50	0.00	1.02
	Total effect (c)	0.46	-0.44	1.36
	Direct effect (c')	-0.04	-0.81	0.72
	R^2 = .3339, F (6,387) = 32.34, p < .001			
		Contrasts		
	Healthy vs PASS	0.18	-0.17	0.61
		Indirect Effects		
Esteem	**Weakness**	-0.08	-0.25	0.05
Social	Exploit	-0.16	-0.53	0.20
Support	**Healthy**	0.29	0.07	0.57
Seeking	**PASS**	0.40	0.16	0.69
	TOTAL	0.45	-0.12	1.02
	Total effect (c)	0.66	-0.26	1.58
	Direct effect (c')	0.21	-0.51	0.93
	R^2 = .4504, F (6,387) = 52.87, p < .001			
		Contrasts		
	Healthy vs PASS	-0.11	-0.44	0.22

Note. 10,000 bootstrap samples. For the indirect effect tests, significant mediation is evidenced by confidence intervals that do not include zero. For the contrast, a confidence interval that does not include zero suggests that one indirect effect is significantly larger than the other.

Table A2.7

Mediation of the Effect of Maladaptive Narcissism on Social Support-Seeking (as a whole) through Perceptions and Availability (Whilst Controlling for Adaptive Narcissism)

		Bootstrapping	
		BC 95% CI	
Mediators	Point Estimate	Lower	Upper
Weakness	0.04	-0.15	0.23
Exploit	1.20	0.74	1.73
Healthy	-0.41	-0.88	0.01
PASS	-0.45	-0.80	-0.17
TOTAL	0.38	-0.47	1.24
Total effect (c)	0.36	-0.82	1.53
Direct effect (c')	-0.02	-0.97	0.93
$R^2 = .4733$, $F\ (6,387) = 57.96$, $p < .001$			
		Contrasts	
Exploit vs PASS	1.65	1.13	2.22

Table A2. 8

Mediation of the Effect of Maladaptive Narcissism on Social Support-Seeking (as a whole, or as one of the subtypes) through Perceptions and Availability (Whilst Controlling for Adaptive Narcissism)

Dependent Variable	Mediators	Point Estimate	Bootstrapping BC 95% CI Lower	Bootstrapping BC 95% CI Upper
		Indirect Effects		
Emotional Social Support Seeking	Weakness	0.01	-0.24	0.25
	Exploit	0.84	0.35	1.39
	Healthy	-0.50	-1.09	0.01
	PASS	-0.57	-1.02	-0.22
	TOTAL	-0.21	-1.21	0.78
	Total effect (c)	-0.18	-1.60	1.24
	Direct effect (c')	0.03	-1.20	1.27
	$R^2 = .3910$, $F\ (6,387) = 41.41$, $p < .001$			
		Contrasts		
	Exploit vs PASS	1.40	0.84	2.03
		Indirect Effects		
Informational Social Support Seeking	Weakness	0.00	-0.25	0.25
	Exploit	1.02	0.53	1.59
	Healthy	-0.48	-1.04	0.01
	PASS	-0.47	-0.90	-0.15
	TOTAL	0.07	-0.91	1.02
	Total effect (c)	-0.76	-2.17	0.65
	Direct effect (c')	-0.83	-2.07	0.42
	$R^2 = .3701$, $F\ (6,387) = 37.89$, $p < .001$			
		Contrasts		
	Exploit vs PASS	1.49	0.93	2.13

Table A2.8 (continued)

		Indirect Effects		
Instrumental	Weakness	0.02	-0.20	0.24
Social	**Exploit**	1.17	0.69	1.74
Support	Healthy	-0.38	-0.85	0.01
Seeking	**PASS**	-0.26	-0.59	-0.02
	TOTAL	0.54	-0.26	1.35
	Total effect (c)	0.93	-0.30	2.15
	Direct effect (c')	0.38	-0.73	1.50
	$R^2 = .3339$, F (6,387) = 32.34, $p < .001$			
		Contrasts		
	Exploit vs PASS	1.43	0.91	2.02
		Indirect Effects		
Esteem	Weakness	0.11	-0.08	0.33
Social	**Exploit**	1.77	1.16	2.45
Support	Healthy	-0.28	-0.62	0.00
Seeking	**PASS**	-0.49	-0.86	-0.19
	TOTAL	1.12	0.24	2.01
	Total effect (c)	1.45	0.21	2.70
	Direct effect (c')	0.33	-0.71	1.38
	$R^2 = .4504$, F (6,387) = 52.87, $p < .001$			
		Contrasts		
	Exploit vs PASS	2.25	1.59	2.98

Note. 10,000 bootstrap samples. For the indirect effect tests, significant mediation is evidenced by confidence intervals that do not include zero. For the contrast, a confidence interval that does not include zero suggests that one indirect effect is significantly larger than the other.

Table A2.9

Mediation of the Effect of Vulnerable Narcissism on Social Support-Seeking (measured with SSS) through Perceptions and Availability

Mediators	Point Estimate	Bootstrapping BC 95% CI Lower	Bootstrapping BC 95% CI Upper
	Indirect Effects		
Weakness	0.00	-0.06	0.06
Exploit	0.08	0.03	0.13
Healthy	-0.07	-0.14	-0.02
PASS	-0.07	-0.13	-0.03
TOTAL	-0.07	-0.19	0.05
Total effect (c)	0.01	-0.12	0.14
Direct effect (c')	0.08	-0.03	0.18
	$R^2 = .4758$, $F\ (5,388) = 70.43$, $p < .001$		
	Contrasts		
Exploit vs. Health	0.15	0.09	0.21
Exploit vs. PASS	0.15	0.09	0.21
Health vs. PASS	0.00	-0.07	0.06

Note. 10,000 bootstrap samples. For the indirect effect tests, significant mediation is evidenced by confidence intervals that do not include zero. For the contrast, a confidence interval that does not include zero suggests that one indirect effect is significantly larger than the other.

Table A2.10

Mediation of the Effect of Vulnerable Narcissism on Social Support-Seeking (measured with SSS) through Perceptions and Availability

		Indirect Effects		
Emotional Social Support Seeking	Weakness	-0.01	-0.09	0.07
	Exploit	0.05	0.02	0.10
	Healthy	-0.09	-0.17	-0.02
	PASS	-0.09	-0.16	-0.04
	TOTAL	-0.13	-0.27	0.00
	Total effect (c)	-0.04	-0.20	0.12
	Direct effect (c')	0.09	-0.05	0.23
	$R^2 = .3934$, $F\ (5,388) = 50.33$, $p < .001$			
		Contrasts		
	Exploit vs. Health	0.14	0.07	0.21
	Exploit vs. PASS	0.14	0.08	0.21
	Health vs. PASS	0.00	-0.08	0.08
		Indirect Effects		
Informational Social Support Seeking	Weakness	-0.01	-0.08	0.07
	Exploit	0.06	0.02	0.10
	Healthy	-0.09	-0.17	-0.02
	PASS	-0.08	-0.15	-0.03
	TOTAL	-0.12	-0.26	0.01
	Total effect (c)	-0.01	-0.17	0.15
	Direct effect (c')	0.11	-0.03	0.25
	$R^2 = .3710$, $F\ (5,388) = 45.77$, $p < .001$			
		Contrasts		
	Exploit vs. Health	0.14	0.08	0.21
	Exploit vs. PASS	0.14	0.08	0.21
	Health vs. PASS	-0.01	-0.09	0.07

Table A2.10 (continued)

		Indirect Effects		
Instrumental	Weakness	-0.01	-0.08	0.06
Social	**Exploit**	0.08	0.03	0.13
Support	**Healthy**	-0.07	-0.13	-0.02
Seeking	**PASS**	-0.04	-0.09	0.00
	TOTAL	-0.03	-0.15	0.08
	Total effect (c)	0.03	-0.11	0.16
	Direct effect (c')	0.06	-0.06	0.18
	$R^2 = .3344$, $F\ (5,388) = 38.98$, $p < .001$			
		Contrasts		
	Exploit vs. Health	0.14	0.09	0.21
	Exploit vs. PASS	0.12	0.06	0.18
	Health vs. PASS	-0.03	-0.10	0.03
		Indirect Effects		
Esteem	Weakness	0.02	-0.04	0.09
Social	**Exploit**	0.12	0.05	0.19
Support	**Healthy**	-0.05	-0.10	-0.01
Seeking	**PASS**	-0.08	-0.13	-0.03
	TOTAL	0.02	-0.10	0.14
	Total effect (c)	0.07	-0.07	0.22
	Direct effect (c')	0.06	-0.06	0.17
	$R^2 = .4487$, $F\ (5,388) = 63.16$, $p < .001$			
		Contrasts		
	Exploit vs. Health	0.17	0.10	0.24
	Exploit vs. PASS	0.20	0.12	0.27
	Health vs. PASS	0.03	-0.03	0.09

Note. 10,000 bootstrap samples. For the indirect effect tests, significant mediation is evidenced by confidence intervals that do not include zero. For the contrast, a confidence interval that does not include zero suggests that one indirect effect is significantly larger than the other.

Table A2.11

Ordinary Least Squares Regression Coefficients From A First Stage Moderated Mediation Model To Test The Effect Of Grandiose Narcissism On Social Support Through Different Motivations

	Outcome variable																			
	M_1: Weakness				M_2: Exploit				M_3: Health				M_4: PASS				Y: Social Support			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.65	<.001	3.36	3.93	2.07	<.001	1.84	2.29	4.80	<.001	4.47	5.13	5.15	<.001	4.84	5.46	-0.40	.38	-1.28	0.49
X: Narcissism	-0.06	.88	-0.84	0.72	2.33	<.001	1.72	2.93	0.58	.20	-0.31	1.47	0.33	.44	-0.51	1.16	0.27	.43	-0.40	0.95
W_1: Condition	-0.18	.32	-0.54	0.18	0.10	.47	-0.18	0.39	0.00	.99	-0.41	0.42	0.21	.28	-0.17	0.60	-0.03	.85	-0.32	0.26
W_2: Condition	-0.05	.82	-0.44	0.35	-0.03	.86	-0.34	0.28	0.04	.87	-0.42	0.49	-0.06	.79	-0.48	0.37	0.01	.94	-0.31	0.33
XW_1: GN*Condition	0.51	.30	-0.46	1.49	-0.18	.64	-0.95	0.58	-0.26	.65	-1.37	0.85	-0.53	.32	-1.58	0.51	0.20	.62	-0.59	0.98
XW_2: GN*Condition	0.25	.65	-0.82	1.32	-0.14	.74	-0.98	0.70	-0.49	.43	-1.72	0.74	-0.14	.82	-1.29	1.02	0.03	.94	-0.83	0.90
M_1: Weakness																	0.03	.64	-0.09	0.14
M_2: Exploit																	0.40	<.001	0.29	0.52
M_3: Health																	0.35	<.001	0.25	0.45
M_4: PASS																	0.24	<.001	0.14	0.34

Conditional Direct Effects of X on Y	*effect*	*p*	*CI*	
Agentic	0.49	.39	-0.63	1.61
Communal	0.09	.88	-1.06	1.24
External	0.24	.66	-0.83	1.31

Indirect effects via Mediators

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*	
Agentic	0.02	-0.10	0.17	0.84	0.35	1.39	0.03	-0.61	0.69	-0.07	-0.47	0.36
Communal	-0.01	-0.14	0.07	0.99	0.53	1.53	0.21	-0.31	0.73	0.19	-0.17	0.58
External	-0.01	-0.12	0.08	1.00	0.50	1.59	0.38	-0.15	0.90	0.11	-0.20	0.42

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
W_1: Condition	0.01	-0.07	0.12	-0.07	-0.40	0.22	-0.09	-0.50	0.33	-0.13	-0.41	0.15
W_2: Condition	0.01	-0.07	0.10	-0.06	-0.43	0.30	-0.17	-0.61	0.28	-0.03	-0.30	0.26

Note. 95% Bootstrap Confidence Interval (BCI) based on 10,000 bootstrap samples. For the indirect effect tests, significant mediation is evidenced by confidence intervals that do not include zero. *** $p < .001$, **$p < .01$, * $p < .05$.

Appendix A – Tables Chapter 2

Table A2.12

Ordinary Least Squares Regression Coefficients From A First Stage Moderated Mediation Model To Test The Effect Of Adaptive Narcissism (Whilst Controlling For Maladaptive Narcissism) On Social Support Through Different Motivations

	Outcome variable																			
	M_1: Weakness				M_2: Exploit				M_3: Health				M_4: PASS				Y: Social Support			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.70	<.001	3.40	3.99	2.21	<.001	1.98	2.44	4.76	<.001	4.42	5.09	5.05	<.001	4.74	5.37	-0.35	.43	-1.24	0.53
AN	-1.03	.012	-1.84	-0.23	-0.27	.39	-0.90	0.35	1.27	.007	0.34	2.19	1.60	<.001	0.74	2.45	0.14	.67	-0.53	0.81
W_1: Condition	-0.14	.47	-0.51	0.24	0.13	.39	-0.16	0.42	-0.02	.92	-0.45	0.41	0.08	.70	-0.32	0.48	-0.03	.87	-0.33	0.28
W_2: Condition	-0.13	.52	-0.53	0.27	-0.05	.74	-0.36	0.26	-0.03	.91	-0.48	0.43	-0.13	.54	-0.56	0.29	-0.04	.83	-0.36	0.29
XW_1: AN*Condition	0.34	.39	-0.44	1.12	-0.14	.64	-0.75	0.47	-0.21	.65	-1.11	0.69	-0.18	.68	-1.01	0.66	0.13	.68	-0.50	0.77
XW_2: AN*Condition	0.37	.36	-0.43	1.17	-0.02	.95	-0.65	0.61	-0.19	.69	-1.11	0.74	0.11	.81	-0.75	0.96	0.14	.68	-0.52	0.79
MN	1.49	.007	0.41	2.56	2.89	<.001	2.05	3.73	-1.24	.049	-2.48	-0.01	-1.91	.0012	-3.06	-0.76	0.00	1.00	-0.96	0.97
M_1: Weakness																	0.02	.70	-0.09	0.14
M_2: Exploit																	0.42	<.001	0.29	0.54
M_3: Health																	0.35	<.001	0.25	0.45
M_4: PASS																	0.24	<.001	0.13	0.34

Conditional Direct Effects of X on Y	*effect*	*p*	*CI*	
Agentic	0.35	.48	-0.61	1.30
Communal	0.08	.89	-0.99	1.15
External	0.00	.99	-0.86	0.86

Indirect effects via Mediators

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*	
Agentic	-0.01	-0.12	0.09	-0.18	-0.55	0.19	0.34	-0.17	0.92	0.35	0.03	0.74
Communal	-0.03	-0.21	0.14	-0.06	-0.46	0.37	0.48	-0.02	1.00	0.43	0.09	0.84
External	-0.03	-0.23	0.15	-0.11	-0.46	0.24	0.51	0.09	0.95	0.35	0.08	0.67

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
W_1: Condition	0.01	-0.05	0.09	-0.06	-0.32	0.18	-0.07	-0.41	0.27	-0.04	-0.27	0.18
W_2: Condition	0.01	-0.05	0.10	-0.01	-0.28	0.27	-0.07	-0.39	0.27	0.03	-0.18	0.25

Note. 95% Bootstrap Confidence Interval (BCI) based on 10,000 bootstrap samples. For the indirect effect tests, significant mediation is evidenced by confidence intervals that do not include zero. *** $p < .001$, **$p < .01$, * $p < .05$.

Table A2.13

Ordinary Least Squares Regression Coefficients From A First Stage Moderated Mediation Model To Test The Effect Of Maladaptive Narcissism (Whilst Controlling For Adaptive Narcissism) On Social Support Through Different Motivations

	Outcome variable																			
	M_1: Weakness				M_2: Exploit				M_3: Health				M_4: PASS				Y: Social Support			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.71	<.001	3.42	4.01	2.22	<.001	1.99	2.45	4.75	<.001	4.42	5.09	5.05	<.001	4.74	5.37	-0.36	.42	-1.25	0.53
MN	1.42	.010	0.34	2.50	2.95	<.001	2.10	3.79	-1.17	.06	-2.41	0.07	-1.82	.002	-2.97	-0.67	-0.01	.99	-0.97	0.96
W_1: Condition	-0.12	.45	-0.43	0.19	0.10	.40	-0.14	0.35	-0.02	.92	-0.37	0.34	0.20	.24	-0.13	0.53	0.01	.93	-0.24	0.26
W_2: Condition	0.06	.75	-0.29	0.41	0.02	.89	-0.25	0.29	-0.03	.89	-0.43	0.37	-0.12	.52	-0.49	0.25	0.04	.81	-0.25	0.32
XW_1: MN*Condition	0.52	.30	-0.47	1.51	-0.15	.71	-0.92	0.62	-0.38	.51	-1.52	0.76	-0.79	.14	-1.85	0.26	0.08	.85	-0.73	0.89
XW_2: MN*Condition	-0.13	.82	-1.27	1.01	-0.36	.43	-1.25	0.53	-0.33	.62	-1.64	0.98	0.10	.87	-1.11	1.31	-0.05	.91	-0.98	0.88
AN	-1.03	.012	-1.82	-0.23	-0.32	.31	-0.94	0.30	1.22	.009	0.31	2.14	1.52	.001	0.67	2.37	0.14	.69	-0.53	0.80
M_1: Weakness																	0.03	.67	-0.09	0.14
M_2: Exploit																	0.42	<.001	0.29	0.54
M_3: Health																	0.35	<.001	0.25	0.45
M_4: PASS																	0.24	<.001	0.13	0.34

Conditional Direct Effects of X on Y	*effect*	*p*	*CI*	
Agentic	0.04	.95	-1.23	1.32
Communal	-0.11	.87	-1.47	1.25
External	0.05	.95	-1.34	1.43

Indirect effects via Mediators

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*	
Agentic	0.05	-0.20	0.33	1.09	0.53	1.74	-0.60	-1.40	0.07	-0.61	-1.15	-0.18
Communal	0.02	-0.11	0.16	1.21	0.68	1.88	-0.33	-0.95	0.25	0.19	-0.67	0.16
External	0.04	-0.17	0.26	1.37	0.73	2.13	-0.29	-0.96	0.35	0.11	-0.93	-0.11

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
W_1: Condition	0.01	-0.07	0.13	-0.06	-0.40	0.24	-0.13	-0.57	0.28	-0.19	-0.50	0.07
W_2: Condition	0.00	-0.09	0.07	-0.15	-0.56	0.26	-0.12	-0.59	0.35	0.02	-0.24	0.31

Note. 95% Bootstrap Confidence Interval (BCI) based on 10,000 bootstrap samples. For the indirect effect tests, significant mediation is evidenced by confidence intervals that do not include zero. *** $p < .001$, **$p < .01$, * $p < .05$.

Table A2.14

Ordinary Least Squares Regression Coefficients From A First Stage Moderated Mediation Model To Test The Effect Of Vulnerable Narcissism On Social Support Through Different Motivations

	Outcome variable																			
	M_1: Weakness				M_2: Exploit				M_3: Health				M_4: PASS				Y: Social Support			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	1.69	<.001	1.19	2.18	2.05	<.001	1.61	2.49	5.94	<.001	5.33	6.54	6.49	<.001	5.93	7.05	-0.46	.33	-1.37	0.46
X: Narcissism	0.47	<.001	0.36	0.58	0.18	<.001	0.08	0.28	-0.23	.001	-0.37	-0.09	-0.30	<.001	-0.43	-0.17	0.07	.19	-0.04	0.18
W_1: Condition	0.25	.43	-0.37	0.88	-0.25	.39	-0.80	0.31	-0.28	.48	-1.04	0.49	-0.01	.97	-0.72	0.70	-0.13	.65	-0.67	0.42
W_2: Condition	-0.10	.78	-0.77	0.58	0.18	.55	-0.42	0.78	0.76	.07	-0.06	1.58	0.21	.59	-0.55	0.97	0.46	.12	-0.12	1.05
XW_1: VN*Condition	-0.05	.51	-0.19	0.10	0.07	.26	-0.05	0.20	0.03	.70	-0.14	0.21	0.00	.99	-0.16	0.16	0.04	.55	-0.09	0.16
XW_2: VN*Condition	0.02	.75	-0.13	0.18	-0.06	.40	-0.20	0.08	-0.21	.031	-0.40	-0.02	-0.07	.42	-0.25	0.10	-0.11	.12	-0.24	0.03
M_1: Weakness																	0.00	.97	-0.12	0.12
M_2: Exploit																	0.41	<.001	0.30	0.52
M_3: Health																	0.34	<.001	0.23	0.44
M_4: PASS																	0.24	<.001	0.14	0.35

Conditional Direct Effects of X on Y	*effect*	*p*	*CI*	
Agentic	0.06	.51	-0.11	0.22
Communal	-0.02	.84	-0.22	0.17
External	0.18	.035	0.01	0.35

Indirect effects via Mediators

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*	
Agentic	0.00	-0.06	0.06	0.09	0.01	0.18	-0.10	-0.23	0.00	-0.08	-0.16	-0.02
Communal	0.00	-0.07	0.07	0.03	-0.04	0.11	-0.12	-0.23	-0.04	-0.08	-0.17	-0.02
External	0.00	-0.06	0.06	0.10	0.02	0.18	-0.01	-0.10	0.08	-0.06	-0.13	0.00

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
W_1: Condition	0.00	-0.01	0.01	0.03	-0.03	0.09	0.01	-0.06	0.08	0.00	-0.05	0.05
W_2: Condition	0.00	-0.01	0.01	-0.02	-0.09	0.04	-0.07	-0.15	0.00	-0.02	-0.07	0.03

Note. 95% Bootstrap Confidence Interval (BCI) based on 10,000 bootstrap samples. For the indirect effect tests, significant mediation is evidenced by confidence intervals that do not include zero. *** $p < .001$, **$p < .01$, * $p < .05$.

Table A2.15
Correlations Between The 10 Different Coping Styles That Resulted From The Bootstrapped Factor Analysis.

	1.	2.	3.	4.	5.	7.	8.	9.	10.	12.
1. Emotional and Esteem Support	1									
2. Risky Ingestion	.18***	1								
3. Planful Problem Solving	**.40*** **	.10	1							
4. Mental Escapism	.17***	**.44*** **	.17***	1						
5. Downplaying	.18***	.18***	.30***	.16***	1					
7. Anger/Aggression	.18***	**.43*** **	.04	**.39*** **	.01	1				
8. Informational and Instrumental Support	.**70*** **	.11*	**.43*** **	.08	.08	.16***	1			
9. Active Escapism	**.33*** **	.27***	**.33*** **	.26***	**.37*** **	.09	.28***	1		
10. Considering Perspective	**.34*** **	.09	**.42*** **	.27***	.29***	.12*	.32***	.29***	1	
12. Looking for (spiritual) Help	**.35*** **	.20***	.30***	.28***	.11*	.22***	**.33*** **	.29***	.22***	1

Note. *$p < .05$, **$p < .01$, ***$p < .001$
Correlations > .32 are in bold

Table A2.16
Results of Moderation Analyses of Grandiose Narcissism on Each Coping Style

Coping Style	R^2	F **(5,388)**	p	ΔR^2	F **(2,388)**	p
Emotional and Esteem Support	**.04**	**2.97**	**.012**	.00	.56	.574
Risky Ingestion	.02	2.42	.142	.00	.54	.581
Planful Problem Solving	**.07**	**6.29**	**< .001**	.01	1.88	.154
Mental Escapism	.01	.40	.848	.00	.37	.691
Downplaying	**.05**	**4.34**	**< .001**	**.02**	**3.43**	**.034**
Anger / Aggression	**.03**	**2.62**	**.024**	.00	.22	.805
Informational and Instrumental Support	.02	1.65	.145	.00	.40	.669
Active Escapism	**.07**	**5.95**	**< .001**	.01	1.89	.153
Considering Perspective	.16	2.01	.077	.00	.31	.731
Looking for (spiritual) Help	**.03**	**2.48**	**.031**	.01	1.17	.312

Table A2.17
Results of Moderation Analyses of Adaptive Narcissism on Each Coping Style

Coping Style	R^2	F (5,388)	p	ΔR^2	F (2,388)	p
Emotional and Esteem Support	.03	1.77	.104	.00	.11	.892
Risky Ingestion	**.04**	**2.98**	**.008**	.00	.74	.479
Planful Problem Solving	**.08**	**5.50**	**< .001**	.01	2.97	.053
Mental Escapism	.02	1.05	.390	.00	.22	.802
Downplaying	**.05**	**3.53**	**.002**	**.02**	**5.00**	**.007**
Anger / Aggression	**.05**	**3.35**	**.003**	.00	.03	.971
Informational and Instrumental Support	.02	1.23	.289	.00	.66	.519
Active Escapism	**.05**	**3.72**	**.001**	.01	1.90	.151
Considering Perspective	.16	1.72	.115	.00	.27	.764
Looking for (spiritual) Help	.03	2.00	.064	.00	.98	.375

Table A2.18

Results of Moderation Analyses of Maladaptive Narcissism on Each Coping Style

Coping Style	R^2	F **(5,388)**	p	ΔR^2	F **(2,388)**	p
Emotional and Esteem Support	.03	1.90	.080	.00	.49	.612
Risky Ingestion	**.04**	**3.00**	**.007**	.00	.81	.445
Planful Problem Solving	**.07**	**5.16**	**< .001**	.01	2.01	.136
Mental Escapism	.02	1.24	.283	.00	.78	.459
Downplaying	**.04**	**2.42**	**.026**	.01	1.77	.172
Anger / Aggression	**.05**	**3.61**	**.002**	.00	.77	.463
Informational and Instrumental Support	.02	1.06	.387	.00	.15	.864
Active Escapism	**.05**	**3.69**	**.001**	.01	1.81	.165
Considering Perspective	.02	1.64	.134	.00	.04	.957
Looking for (spiritual) Help	.03	1.95	.072	.00	.82	.440

Table A2.19

Results of Moderation Analyses of Vulnerable Narcissism on Each Coping Style

Coping Style	R^2	F (5,388)	p	ΔR^2	F (2,388)	p
Emotional and Esteem Support	.01	.64	.672	.01	1.51	.222
Risky Ingestion	**.12**	**1.36**	**< .001**	.01	2.23	.109
Planful Problem Solving	**.05**	**4.12**	**.001**	.01	2.30	.101
Mental Escapism	**.20**	**19.10**	**< .001**	.01	1.56	.211
Downplaying	.01	.81	.541	.00	.12	.883
Anger / Aggression	**.11**	**9.87**	**< .001**	.01	2.40	.093
Informational and Instrumental Support	.03	2.13	.062	**.02**	**3.92**	**.021**
Active Escapism	.01	.61	.690	.00	.10	.909
Considering Perspective	**.03**	**2.69**	**.021**	.01	2.01	.136
Looking for (spiritual) Help	.02	1.37	.235	**.02**	**3.28**	**.039**

Table A2.20

Conditional Effects of Narcissism on Different Coping Strategies Depending on Type of Stressor.

Predictor Variable (Type of Narcissism)	**Outcome Variable (Coping Style)**	**Type of Stressor**	**Point Estimate of Slope**	**Bootstrapping BC 95% CI**	
				Lower	**Upper**
Grandiose Narcissism	Downplaying	Agentic	.05	-1.18	1.29
		Communal	**2.40**	**1.14**	**3.65**
		External	**1.31**	**.15**	**2.47**
		R^2 = .0530, F (5,388) = 4.34, p < .001; ΔR^2= .0167, F (2,387) = 3.43, p = .034			
Adaptive Narcissism	Downplaying	Agentic	-.53	-1.59	.54
		Communal	**1.78**	**.58**	**2.97**
		External	.53	-.43	1.48
		R^2 = .0519, F (5,388) = 3.53, p = .002; ΔR^2= .0245, F (2,387) = 5.00, p = .007			

Note. Conditional effects are the effects of narcissism on an outcome variable (e.g., each coping strategy) per condition. Significant conditional effects are bolded, and are evidenced by confidence intervals that do not include zero. ΔR^2 depicts the test of the interaction between type of stressor and narcissism. A non-significant ΔR^2 means that the regression slope of coping-style as a function of narcissism is not significantly different in the three conditions.

Table A2.21
Conditional Effects of Narcissism on Different Coping Strategies Depending on Type of Stressor.

Outcome Variable (Coping Style)	Predictor Variable (Type of Narcissism)	Type of Stressor	Point Estimate	Bootstrapping BC 95% CI	
				Lower	Upper
Downplaying	Low Grandiose Narcissism (-1SD)	**A vs C**	**.30**	**.04**	**.57**
		AC vs E	-.16	-.46	.13
	Medium Grandiose Narcissism (Mean)	A vs C	.05	-.13	.24
		AC vs E	-.18	-.38	.03
	High Grandiose Narcissism (+1SD)	A vs C	-.20	-.46	.07
		AC vs E	-.19	-.48	.11
		R^2 = .0530, F (5,388) = 4.34, p < .001; ΔR^2= .0167, F (2,387) = 3.43, p = .034			
Downplaying	Low Adaptive Narcissism (-1SD)	**A vs C**	**.36**	**.09**	**.63**
		AC vs E	-.17	-.47	.12
	Medium Adaptive Narcissism (Mean)	A vs C	.04	-.15	.23
		AC vs E	-.16	-.37	.05
	High Adaptive Narcissism (+1SD)	**A vs C**	**-.28**	**-.56**	**-.00**
		AC vs E	-.14	-.43	.15
		R^2 = .0519, F (5,388) = 3.53, p = .002; ΔR^2= .0245, F (2,387) = 5.00, p = .007			

Note. Conditional effects are the effects of narcissism on an outcome variable (e.g., each coping strategy) per condition. Significant conditional effects are bolded, and are evidenced by confidence intervals that do not include zero. ΔR^2 depicts the test of the interaction between type of stressor and narcissism. A non-significant ΔR^2 means that the regression slope of coping-style as a function of narcissism is not significantly different in the three conditions.

Table A3.1

Correlations between Narcissism (Grandiose, Adaptive, Maladaptive, and Vulnerable), Mediators, and Coping Styles

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.
1. GN	1																								
2. AN	.83***	1																							
3. MN	.86***	.53***	1																						
4. VN	-.10	-.27***	.10	1																					
5. Weak	-.02	-.12	.08	.36***	1																				
6. Exploit	.21**	.05	.29***	.15*	.22**	1																			
7. Health	-.03	-.03	-.06	-.20**	-.40***	-.20**	1																		
8. PASS	.16*	.19*	.05	-.34***	-.30**	-.120**	.39**	1																	
9. BIS	-.27**	-.37**	-.09	.61***	.15*	.06	-.07	-.21**	1																
1. BAS	.47**	.31**	.48***	.03	-.07	.08	.06	.14	.04	1															
11. I	-.16*	-.32**	.07	.53**	.15*	.17*	.05	-.19*	.53**	.14	1														
12. O	.44***	.44***	.25***	-.47***	-.23**	-.08	.14	.41***	-.57***	.29***	-.37***	1													
13. SE	.24**	.10	.33***	.15	.04	.32**	-.09	-.04	.09	.22***	.16*	.10	1												
14. SP	.56**	.52**	.39***	-.21**	-.20**	.10	.16*	.44**	-.33**	.41**	-.21**	.65***	.20**	1											
15. IC	.31**	.38**	.16*	-.23**	-.21**	-.07	.08	.21**	-.29**	.19*	-.27**	.45***	-.03	.41***	1										
16. EC	-.15*	-.28**	.00	.36***	.21**	.24**	-.18*	-.29**	.25**	-.02	.38**	-.31***	.30**	-.20**	-.44***	1									
17. SS	.10	.05	.05	-.12	-.06	-.01	.11	.34**	-.10	.02	.02	.20**	.02	.36***	.04	.02	1								
18. RI	.00	-.06	.09	.22**	.09	.04	-.02	-.19*	.15*	.00	.32**	-.15*	.22**	-.10	-.06	.16*	.13	1							
19. PPS	.15*	.21**	.06	-.21**	-.02	.07	.06	.13	-.27**	.09	-.14	.32***	.03	.33**	.09	-.06	.31***	-.08							
20. ME	-.14	-.26***	.00	.44**	.14	.06	-.09	-.22**	.33**	.00	.28**	-.27***	.18*	-.08	-.21**	.28***	.24**	.35***	-.08	1					
21. D	.16*	.16*	.12	-.10	-.03	.14	-.07	-.03	-.22**	.05	-.03	.26***	.20**	.20**	.14	.04	.07	.02	.18*	.11	1				
22. A	.02	-.03	.08	.21**	.13	.05	-.13	-.11	.20**	.07	.28**	-.08	.33**	.07	-.07	.24**	.17*	.34***	.02	.26***	.03	1			
23. AE	.12	.15*	.02	-.13	-.11	-.08	-.08	.13	-.17*	.02	-.13	.32***	.03	.28***	.19**	-.07	.38**	.14	.25***	.14	.26***	.19**	1		
24. CP	.13	.09	.08	-.06	-.171*	-.13	.08	.13	-.07	.13	.03	.21**	.08	.28***	-.06	.07	.36**	.06	.45***	.27***	.20**	.12	.37***	1	
25. LfH	.21**	.17*	.14	-.14	.03	.14	-.19*	.04	-.04	.08	-.17*	.20**	.05	.29***	.07	-.05	.33**	.04	.18*	.02	-.03	.09	.37***	.18**	1

Note. GN = Grandiose Narcissism; AN = Adaptive Narcissism; MN = Maladaptive Narcissism; VN = Vulnerable Narcissism; Weakness = Perception that asking social support is a weakness; Exploit = Perception that asking social support is an opportunity to manipulate and exploit others; Health = Perception that seeking social support is natural and healthy; PASS = Perceived Availability of Social Support; BIS = Behavioural Inhibition; BAS = Behavioural Approach; I = Impulsivity; SE = Self-enhancement; SP = Self-Protection; O = Optimism; SS = Social Support; RI = Risky Ingestion; PPS = Planful Problem Solving; ME = Mental Escapism; D = Downplaying; A = Anger/Aggression; CP = Considering Perspective; LfH = Looking for (spiritual) Help

*$p < .05$, **$p < .01$, ***$p < .001$

Table A3.2

Results From Upper Level (2-2-1) Mediation Models, with Social Support as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.

	GN		**AN**		**MN**		**VN**	
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: Weakness	-0.21	.81	**-1.53**	**.010**	1.81	.052	**0.44**	**< .001**
M_2: Exploit	**1.49**	**.008**	-0.79	.08	**2.73**	**< .001**	**0.14**	**.036**
M_3: Health	-0.24	.74	-0.07	.91	-0.32	.66	**-0.19**	**.008**
M_4: PASS	**1.53**	**.033**	**1.53**	**.016**	-0.48	.58	**-0.39**	**< .001**
M_5: External Locus of Control	**-1.21**	**.034**	**-2.40**	**< .001**	**1.82**	**.004**	**0.39**	**< .001**
M_6: Internal Locus of Control	**2.46**	**< .001**	**2.41**	**< .001**	-0.50	.455	**-0.24**	**< .001**
From mediator to social support	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: Weakness	0.02	.78	0.02	.804	0.02	.80	0.03	.66
M_2: Exploit	0.03	.71	0.05	.580	0.05	.58	0.04	.62
M_3: Health	-0.02	.84	-0.03	.771	-0.03	.77	-0.02	.80
M_4: PASS	**0.37**	**< .001**	**0.38**	**< .001**	**0.38**	**< .001**	**0.37**	**< .001**
M_5: External Locus of Control	0.13	.151	0.12	.183	0.12	.18	0.15	.11
M_6: Internal Locus of Control	0.03	.747	0.05	.586	0.05	.59	0.05	.69
Indirect effects via mediator								
	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: Weakness	0.00	.86	-0.03	.81	0.03	.81	0.02	.65
M_2: Exploit	0.05	.71	-0.04	.59	0.13	.58	0.01	.63
M_3: Health	0.00	.87	0.00	.98	0.01	.81	0.00	.80
M_4: PASS	**0.56**	**.043**	**0.57**	**.036**	-0.18	.59	**-0.14**	**.002**
M_5: External Locus of Control	-0.16	.25	-0.30	.19	0.22	.20	0.06	.12
M_6: Internal Locus of Control	0.08	.75	0.12	.60	-0.03	.68	-0.11	.64
Direct effects								
	c	*p*	*c*	*p*	*c*	*p*	*c*	*p*
narcissism to social support	0.49	.44	-0.19	.72	0.28	.71	-0.06	.48

Table A3.3

Results From Upper Level (2-2-1) Mediation Models, with Risky Ingestion as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.

	GN		**AN**		**MN**		**VN**	
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: Impulsivity	-1.66	.029	-4.22	< .001	4.02	< .001	0.79	< .001
M_2: Self-Enhancement	3.67	< .001	2.11	< .001	1.06	.044	-0.20	.002
M_3: Self-Protection	1.95	.002	-0.63	.276	3.20	< .001	0.14	.06
M_4:External Locus of Control	-1.23	.032	-2.40	< .001	1.80	.005	0.40	< .001
M_5:Internal Locus of Control	2.48	< .001	2.42	< .001	-0.49	.47	-0.24	.001
From mediator to social support	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: Impulsivity	**0.17**	**.001**	**0.17**	**.002**	**0.17**	**.002**	**0.16**	**.005**
M_2: Self-Enhancement	-0.14	.25	-0.14	.251	-0.14	.251	-0.13	.24
M_3: Self-Protection	**0.15**	**.019**	**0.15**	**.025**	**0.15**	**.025**	**0.15**	**.019**
M_4:External Locus of Control	0.02	.82	0.02	.83	0.02	.83	0.01	.95
M_5:Internal Locus of Control	0.08	.38	0.08	.38	0.08	.38	0.08	.38
Indirect effects via mediator								
	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: Impulsivity	-0.29	.05	**-0.71**	**.004**	**0.68**	**.012**	**0.12**	**.006**
M_2: Self-Enhancement	-0.53	.26	-0.30	.27	-0.15	.29	0.03	.30
M_3: Self-Protection	0.30	.08	-0.09	.33	0.47	.06	0.02	.16
M_4:External Locus of Control	-0.02	.82	-0.04	.83	0.03	.83	0.00	.95
M_5:Internal Locus of Control	0.20	.39	0.19	.36	-0.04	.52	-0.02	.36
Direct effects								
	c'	*p*	*c'*	*p*	*c'*	*p*	*c'*	*p*
narcissism to social support	0.39	.54	-0.01	.99	0.41	.55	0.07	.40

Table A3.4

Results From Upper Level (2-2-1) Mediation Models, with Planful Problem Solving as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.

	GN		**AN**		**MN**		**VN**	
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: BAS	**3.50**	**< .001**	0.38	.44	**3.35**	**< .001**	0.04	.61
M_2: Impulsivity	**-1.80**	**.016**	**-4.26**	**< .001**	**3.95**	**< .001**	**0.79**	**< .001**
M_3: Self- Enhancement	**3.74**	**< .001**	**2.14**	**< .001**	**1.11**	**.034**	**-0.20**	**.002**
M_4: Self-Protection	**1.88**	**.003**	-0.65	.26	**3.17**	**< .001**	0.14	.08
M_5:Optimism	**4.19**	**< .001**	**3.43**	**< .001**	-0.32	.70	**-0.49**	**< .001**
M_6:External Locus of Control	**-1.23**	**.032**	**-2.40**	**< .001**	**1.81**	**.005**	**0.40**	**< .001**
M_7:Internal Locus of Control	**2.44**	**< .001**	**2.40**	**< .001**	-0.52	.44	**-0.24**	**.001**
From mediator to social support	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: BAS	0.01	.92	0.01	.91	0.01	.91	-0.02	.85
M_2: Impulsivity	-0.05	.45	-0.03	.67	-0.03	.67	0.02	.81
M_3: Self- Enhancement	**0.42**	**.001**	**0.38**	**.002**	**0.38**	**.002**	**0.36**	**.004**
M_4: Self-Protection	-0.02	.79	-0.02	.86	-0.02	.86	-0.04	.68
M_5:Optimism	**0.19**	**.022**	**0.18**	**.029**	**0.18**	**.029**	**0.17**	**.038**
M_6:External Locus of Control	.053.	.57	0.06	.53	0.06	.53	0.08	.40
M_7:Internal Locus of Control	-0.10	.28	-0.10	.24	-0.10	.24	-0.10	.27
Indirect effects via mediator								
	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: BAS	0.04	.92	0.01	.91	0.04	.91	0.00	.86
M_2: Impulsivity	0.09	.47	0.12	.67	-0.11	.67	0.01	.81
M_3: Self- Enhancement	**1.55**	**.002**	**0.82**	**.007**	0.42	.08	**-0.07**	**.034**
M_4: Self-Protection	-0.05	.79	0.01	.87	-0.05	.86	-0.01	.67
M_5:Optimism	**0.81**	**.035**	0.62	.05	-0.06	.70	-0.08	.06
M_6:External Locus of Control	-0.07	.57	-0.13	.53	0.10	.54	0.03	.40
M_7:Internal Locus of Control	-0.23	.29	-0.25	.26	0.05	.53	0.02	.30
Direct effects								
	c'	*p*	*c'*	*p*	*c'*	*p*	*c'*	*p*
narcissism to social support	-0.73	.38	-0.34	.62	-0.81	.33	-0.17	.10

Table A3.5

Results From Upper Level (2-2-1) Mediation Models, with Mental Escapism as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.

	GN		**AN**		**MN**		**VN**	
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: BIS	**-2.30**	**< .001**	**-2.94**	**< .001**	1.32	.07	**0.71**	**< .001**
M_2: BAS	**3.50**	**< .001**	0.38	.44	**3.35**	**< .001**	0.03	.70
M_3: Self- Enhancement	**3.75**	**< .001**	**2.14**	**< .001**	**1.09**	**.038**	**-0.18**	**.004**
M_4: Self-Protection	**1.93**	**.002**	-0.63	.27	**3.18**	**< .001**	**0.15**	**.043**
M_5:Optimism	**4.11**	**< .001**	**3.41**	**< .001**	-0.38	.64	**-0.48**	**< .001**
M_6:External Locus of Control	**-1.22**	**.033**	**-2.40**	**< .001**	**1.81**	**.004**	**0.40**	**< .001**
M_7:Internal Locus of Control	**2.44**	**< .001**	**2.41**	**< .001**	-0.51	.45	**-0.23**	**.001**
From mediator to social support	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: BIS	**0.22**	**.003**	**0.19**	**.015**	**0.19**	**.015**	0.08	.36
M_2: BAS	0.00	.98	-0.03	.76	-0.03	.76	-0.04	.61
M_3: Self- Enhancement	**0.30**	**.023**	**0.32**	**.010**	**0.32**	**.010**	0.21	.08
M_4: Self-Protection	0.13	.11	0.11	.16	0.11	.16	0.10	.19
M_5:Optimism	**-0.20**	**.009**	**-0.19**	**.010**	**-0.19**	**.010**	**-0.17**	**.025**
M_6:External Locus of Control	0.10	.20	0.08	.31	0.08	.31	0.04	.62
M_7:Internal Locus of Control	-0.06	.57	-0.04	.69	-0.04	.69	-0.07	.45
Indirect effects via mediator								
	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: BIS	**-0.50**	**.016**	**-0.56**	**.014**	0.25	.10	0.06	.37
M_2: BAS	0.01	.98	-0.01	.77	-0.09	.76	0.00	.77
M_3: Self- Enhancement	**1.11**	**.028**	**0.68**	**.014**	0.35	.12	-0.04	.12
M_4: Self-Protection	0.25	.18	-0.07	.39	0.36	.19	0.02	.30
M_5:Optimism	**-0.80**	**.013**	**-0.64**	**.023**	0.07	.65	**0.08**	**.039**
M_6:External Locus of Control	-0.12	.28	-0.19	.31	0.14	.32	0.02	.62
M_7:Internal Locus of Control	-0.13	.56	-0.09	.70	0.02	.74	0.02	.45
Direct effects								
	c'	*p*	*c'*	*p*	*c'*	*p*	*c'*	*p*
narcissism to social support	-0.96	.26	**-1.43**	**.020**	0.52	.46	**0.35**	**.001**

Table A3.6

Results From Upper Level (2-2-1) Mediation Models, with Downplaying as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.

	GN		**AN**		**MN**		**VN**	
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: BIS	**-2.38**	**< .001**	**-3.03**	**< .001**	1.35	.063	**0.71**	**< .001**
M_2: BAS	**3.50**	**< .001**	0.37	.45	**3.36**	**< .001**	0.03	.689
M_3: Impulsivity	**-1.78**	**.018**	**-4.23**	**< .001**	**3.94**	**< .001**	**0.79**	**< .001**
M_4: Self-Enhancement	**3.71**	**< .001**	**2.14**	**< .001**	**1.06**	**.045**	**-0.19**	**.004**
M_5: Self-Protection	**1.91**	**.003**	-0.59	.30	**3.13**	**< .001**	**0.15**	**.047**
M_6: Optimism	**4.16**	**< .001**	**3.42**	**< .001**	-0.35	.668	**-0.48**	**< .001**
From mediator to social support	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: BIS	**-0.21**	**.027**	**-0.21**	**.025**	**-0.21**	**.025**	**-0.20**	**.036**
M_2: BAS	-0.06	.51	-0.06	.53	-0.06	.53	-0.06	.56
M_3: Impulsivity	0.08	.27	0.07	.33	0.07	.33	0.08	.29
M_4: Self-Enhancement	0.12	.41	0.13	.35	0.13	.35	0.11	.40
M_5: Self-Protection	**0.18**	**.010**	**0.17**	**.015**	**0.17**	**.015**	**0.18**	**.009**
M_6: Optimism	0.04	.68	0.03	.70	0.03	.70	0.05	.54
Indirect effects via mediator								
	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: BIS	**0.49**	**.042**	**0.62**	**.035**	-0.28	.16	**-0.14**	**.037**
M_2: BAS	-0.22	.52	-0.02	.624	-0.20	.54	0.00	.75
M_3: Impulsivity	-0.14	.33	-0.31	.335	0.29	.35	0.06	.27
M_4: Self-Enhancement	0.43	.41	0.28	.361	0.14	.39	-0.02	.42
M_5: Self-Protection	0.34	.06	-0.10	.352	**0.54**	**.046**	0.03	.14
M_6: Optimism	0.15	.68	0.11	.696	-0.01	.78	-0.03	.55
Direct effects								
	c'	*p*	*c'*	*p*	*c'*	*p*	*c'*	*p*
narcissism to social support	0.26	.75	0.121	.84	0.072	.92	0.002	.98

Table A3.7

Results From Upper Level (2-2-1) Mediation Models, with Anger/Aggression as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.

	GN		**AN**		**MN**		**VN**	
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: BIS	**-2.34**	**< .001**	**-2.95**	**< .001**	1.31	.070	**0.70**	**< .001**
M_2: BAS	**3.50**	**< .001**	0.38	.45	**3.35**	**< .001**	0.03	.68
M_3: Self- Enhancement	**-1.74**	**.021**	**-4.23**	**< .001**	**3.96**	**< .001**	**0.79**	**< .001**
M_4: Self-Protection	**3.72**	**< .001**	**2.13**	**< .001**	**1.08**	**.041**	**-0.19**	**.003**
M_5:Optimism	**1.93**	**.002**	-0.62	.28	**3.17**	**< .001**	**0.15**	**.044**
M_6:External Locus of Control	**-1.22**	**.033**	**-2.40**	**< .001**	**1.81**	**.005**	**0.39**	**< .001**
M_7:Internal Locus of Control	**2.46**	**< .001**	**2.41**	**< .001**	0.50	.45	**-0.24**	**.001**
From mediator to social support	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: BIS	0.11	.12	0.11	.12	0.11	.12	0.12	.13
M_2: BAS	-0.05	.62	-0.05	.59	-0.05	.59	-0.06	.51
M_3: Self- Enhancement	0.11	.08	0.11	.09	0.11	.09	0.11	.08
M_4: Self-Protection	0.16	.17	0.16	.19	0.16	.19	0.14	.21
M_5:Optimism	**0.21**	**.005**	**0.21**	**.006**	**0.21**	**.006**	**0.21**	**.005**
M_6:External Locus of Control	0.10	.24	0.10	.23	0.10	.23	0.10	.26
M_7:Internal Locus of Control	0.04	.68	0.04	.70	0.04	.70	0.04	.69
Indirect effects via mediator								
	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: BIS	-0.27	.13	-0.34	.12	0.15	.23	0.09	.13
M_2: BAS	-0.16	.62	-0.02	.66	-0.16	.60	0.00	.72
M_3: Self- Enhancement	-0.19	.15	-0.46	.09	0.43	.10	0.09	.08
M_4: Self-Protection	0.61	.18	0.34	.21	0.17	.25	-0.03	.25
M_5:Optimism	**0.41**	**.041**	-0.13	.34	**0.68**	**.032**	0.03	.11
M_6:External Locus of Control	-0.12	.31	-0.24	.24	0.18	.26	0.04	.27
M_7:Internal Locus of Control	0.10	.68	0.09	.70	-0.02	.73	-0.01	.70
Direct effects								
	c'	*p*	*c'*	*p*	*c'*	*p*	*c'*	*p*
narcissism to social support	-0.15	.83	0.07	.91	-0.20	.78	-0.01	.92

Table A3.8
Results From Upper Level (2-2-1) Mediation Models, with Active Escapism as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.

	GN		**AN**		**MN**		**VN**	
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: BIS	**-2.37**	**< .001**	**-2.97**	**< .001**	1.29	.07	**0.70**	**< .001**
M_2: BAS	**3.50**	**< .001**	0.39	.44	**3.34**	**< .001**	0.03	.69
M_3: Impulsivity	**-1.80**	**.017**	**-4.26**	**< .001**	**3.95**	**< .001**	**0.79**	**< .001**
M_4: Self-Enhancement	**3.74**	**< .001**	**2.14**	**< .001**	**1.11**	**.035**	**-0.19**	**.003**
M_5: Self-Protection	**1.89**	**.003**	-0.64	.27	**3.18**	**< .001**	**0.15**	**.048**
M_6:External Locus of Control	**-1.23**	**.032**	**-2.40**	**< .001**	**1.81**	**.005**	**0.40**	**< .001**
M_7:Internal Locus of Control	**2.47**	**< .001**	**2.41**	**< .001**	-0.47	.48	**-0.24**	**.001**
From mediator to social support	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: BIS	-0.04	.67	-0.04	.62	-0.04	.62	0.00	.98
M_2: BAS	-0.07	.41	-0.04	.62	-0.04	.62	-0.10	.19
M_3: Impulsivity	-0.04	.59	-0.02	.76	-0.02	.76	-0.02	.79
M_4: Self-Enhancement	**0.36**	**.002**	**0.37**	**.001**	**0.37**	**.001**	**0.32**	**.002**
M_5: Self-Protection	0.00	.98	0.02	.85	0.02	.85	-0.01	.90
M_6:External Locus of Control	0.03	.73	0.03	.73	0.03	.73	0.04	.65
M_7:Internal Locus of Control	0.13	.13	0.13	.15	0.13	.15	0.13	.13
Indirect effects via mediator								
	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: BIS	0.09	.67	0.13	.63	-0.06	.64	0.00	.98
M_2: BAS	-0.24	.41	-0.02	.66	-0.14	.62	0.00	.71
M_3: Impulsivity	0.06	.60	0.09	.76	-0.08	.76	-0.01	.79
M_4: Self-Enhancement	**1.35**	**.009**	**0.78**	**.008**	0.41	.10	**-0.06**	**.049**
M_5: Self-Protection	0.00	.98	-0.01	.85	0.05	.85	0.00	.90
M_6:External Locus of Control	-0.04	.74	-0.07	.73	0.06	.73	0.02	.65
M_7:Internal Locus of Control	0.32	.15	0.31	.15	-0.06	.50	-0.03	.16
Direct effects								
	c'	*p*	*c'*	*p*	*c'*	*p*	*c'*	*p*
narcissism to social support	-0.56	.52	-0.10	.88	-0.87	.31	-0.06	.54

Table A3.9

Results From Upper Level (2-2-1) Mediation Models, with Considering Perspective as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.

	GN		**AN**		**MN**		**VN**	
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: Impulsivity	**-1.77**	**.019**	**-4.25**	**< .001**	**3.96**	**< .001**	**0.79**	**< .001**
M_2: Self-Enhancement	**3.74**	**< .001**	**2.15**	**< .001**	**1.09**	**.037**	**-0.19**	**.003**
M_3: Self-Protection	**1.89**	**.003**	-0.64	.27	**3.18**	**< .001**	0.15	.06
From mediator to social support	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: Impulsivity	0.05	.36	0.04	.49	0.04	.49	0.08	.18
M_2: Self-Enhancement	**0.41**	**< .001**	**0.42**	**< .001**	**0.42**	**< .001**	**0.35**	**< .001**
M_3: Self-Protection	0.04	.62	0.04	.61	0.04	.61	0.03	.69
Indirect effects via mediator								
	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: Impulsivity	-0.09	.38	-0.18	.49	0.16	.49	0.07	.19
M_2: Self-Enhancement	**1.52**	**.001**	**0.90**	**.004**	**0.46**	**.046**	**-0.07**	**.030**
M_3: Self-Protection	0.07	.62	-0.02	.64	0.12	.61	0.00	.70
Direct effects								
	c'	*p*	*c'*	*p*	*c'*	*p*	*c'*	*p*
narcissism to social support	-0.48	.51	-0.33	.56	-0.33	.69	-0.07	.42

Table A3.10

Results From Upper Level (2-2-1) Mediation Models, with Looking for (spiritual) Help as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.

	GN		**AN**		**MN**		**VN**	
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: PASS	**1.46**	**.045**	**1.53**	**.017**	-0.59	.50	**-0.37**	**< .001**
M_2: BAS	**3.50**	**< .001**	0.38	.44	**3.35**	**< .001**	0.03	.66
M_3: Impulsivity	**-1.82**	**.015**	**-4.26**	**< .001**	**3.94**	**< .001**	**0.79**	**< .001**
M_4: Self-Enhancement	**3.72**	**< .001**	**2.12**	**< .001**	**1.10**	**.037**	**-0.19**	**.003**
M_5: Self-Protection	**1.89**	**.003**	-0.65	.26	**3.17**	**< .001**	0.15	.05
M_6:External Locus of Control	**-1.23**	**.031**	**-2.40**	**< .001**	**1.80**	**.005**	**0.40**	**< .001**
M_7:Internal Locus of Control	**2.45**	**< .001**	**2.41**	**< .001**	-0.05	.45	**-0.24**	**.001**
From mediator to social support	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: PASS	-0.08	.20	-0.09	.20	-0.09	.20	-0.09	.17
M_2: BAS	-0.02	.77	-0.02	.75	-0.02	.75	0.00	.96
M_3: Impulsivity	**-0.10**	**.027**	**-0.12**	**.019**	**-0.12**	**.019**	-0.08	.18
M_4: Self-Enhancement	**0.35**	**.002**	**0.38**	**.001**	**0.38**	**.001**	**0.37**	**.001**
M_5: Self-Protection	-0.02	.78	-0.03	.73	-0.03	.73	-0.01	.91
M_6:External Locus of Control	0.01	.90	0.00	.96	0.00	.96	0.02	.83
M_7:Internal Locus of Control	-0.06	.33	-0.05	.45	-0.05	.45	-0.06	.38
Indirect effects via mediator								
	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: PASS	-0.12	.31	-0.13	.26	0.05	.53	0.04	.19
M_2: BAS	-0.08	.77	-0.01	.78	-0.08	.75	0.00	.96
M_3: Impulsivity	0.19	.11	**0.52**	**.020**	**-0.48**	**.030**	-0.06	.18
M_4: Self-Enhancement	**1.29**	**.008**	**0.80**	**.004**	0.42	.10	**-0.07**	**.031**
M_5: Self-Protection	-0.04	.77	0.02	.75	-0.08	.73	0.00	.91
M_6:External Locus of Control	-0.01	.90	-0.01	.96	0.01	.96	0.01	.83
M_7:Internal Locus of Control	-0.15	.34	-0.12	.45	0.03	.59	0.01	.39
Direct effects								
	c'	*p*	*c'*	*p*	*c'*	*p*	*c'*	*p*
narcissism to social support	0.58	.42	-0.40	.46	0.81	.30	-0.09	.23

Table A3.11
Results from Paired Samples T-Tests, to check for significant differences in Well-being between Day 0 and Day 15.

	Paired difference						
Difference (day 15 – day 0)	*Mean*	*SD*	*CI*		*t*	*df*	*p*
Psychological well-being	0.36	11.08	-1.42	2.14	0.40	150	.69
Satisfaction with life	0.40	5.26	-0.44	1.25	0.94	150	.35
Depression	**-1.91**	**9.46**	**-3.43**	**-0.39**	**-2.49**	**150**	**.014**
Anxiety	-1.03	8.52	-2.40	0.34	-1.48	150	.14
Social loneliness	-0.26	5.01	-1.06	0.54	-0.64	153	.52
Emotional loneliness	0.64	5.28	-0.20	1.48	1.50	153	.14

Table A3.12

Results From Multilevel (2-1-2) Mediation Models, with Change in Depression as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.

	GN		**AN**		**MN**		**VN**	
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: Social Support	1.04	.14	0.37	.44	0.47	.49	-0.12	.12
M_2: RI	0.05	.92	-0.35	.41	0.67	.20	**0.21**	**.001**
M_3: PPS	**1.55**	**.034**	**1.44**	**.005**	0.68	.32	**-0.21**	**.03**
M_4: ME	-1.01	.16	**-1.66**	**< .001**	-0.03	.96	**0.50**	**< .001**
M_5: D	**1.41**	**.030**	**0.96**	**.021**	1.00	.10	-0.06	.44
M_6: A/A	0.20	.70	-0.19	.64	0.69	.21	**0.20**	**.004**
M_7: AE	1.08	.11	0.91	.05	0.04	.95	-0.15	.05
M_8: CP	1.14	.07	0.60	.15	0.62	.29	-0.04	.62
M_9: LfH	**1.55**	**.007**	**0.94**	**.034**	1.01	.06	**-0.13**	**.033**
From mediator to outcome variable	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: Social Support	0.14	.24	0.12	.27	0.12	.27	0.11	.34
M_2: RI	-0.05	.75	-0.02	.89	-0.02	.89	-0.03	.84
M_3: PPS	-0.04	.79	-0.07	.56	-0.07	.57	-0.03	.81
M_4: ME	-0.16	.25	-0.12	.37	-0.12	.36	-0.07	.66
M_5: D	0.30	.05	0.27	.07	0.27	.07	**0.28**	**.050**
M_6: A/A	0.32	.08	**0.36**	**.034**	**0.36**	**.036**	0.35	.06
M_7: AE	0.00	1.00	-0.06	.71	-0.06	.73	-0.04	.83
M_8: CP	-0.08	.67	-0.11	.54	-0.11	.54	-0.10	.60
M_9: LfH	-0.10	.46	-0.06	.61	-0.06	.60	-0.11	.40
Indirect effects via mediator								
	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: Social Support	0.15	.34	0.04	.52	0.06	.56	-0.01	.42
M_2: RI	0.00	.93	0.01	.89	-0.02	.89	-0.01	.84
M_3: PPS	-0.05	.79	-0.11	.58	-0.05	.65	0.01	.81
M_4: ME	0.16	.42	0.20	.40	0.00	.96	-0.03	.66
M_5: D	0.42	.16	0.26	.19	0.27	.24	-0.02	.48
M_6: A/A	0.06	.70	-0.07	.65	0.24	.22	0.07	.15
M_7: AE	0.00	1.00	-0.06	.72	0.00	.95	0.01	.83
M_8: CP	-0.09	.68	-0.07	.57	-0.07	.60	0.00	.71
M_9: LfH	-0.15	.49	-0.06	.62	-0.07	.62	0.02	.42
Direct effects	*c'*	*p*	*c'*	*p*	*c'*	*p*	*c'*	*p*
narcissism to outcome variable	-0.31	.75	1.20	.08	**-2.12**	**.028**	-0.16	.20
			-2.00	**.037**	**1.27**	**.042**		

Note: RI = Risky Ingestion, PPS = Planful Problem Solving, ME = Mental Escapism, D=Downplaying, A/A=Anger/Aggression, AE=Active Escapism, CP=Considering Perspective, LfH=Looking for (spiritual) Help, x2= adaptive narcissism, x3 = maladaptive narcissism.

Table A4.1
Differences across the different datasets (Independent Samples T-test)

	t	*df*	*p*	Mean Difference	CI	
BIS	-1.84	553.09	0.07	-0.21	-0.43	0.01
BAS	-0.88	733.00	0.38	-0.07	-0.23	0.09
Impulsivity	-1.54	733.00	0.12	-1.07	-2.43	0.30
Impulsivity	-1.57	733.00	0.12	-0.09	-0.20	0.02
SP	**1.99**	**729.00**	**0.047**	**0.18**	**0.00**	**0.35**
SE	1.52	496.41	0.13	0.12	-0.04	0.28
Optimsim	1.09	516.43	0.27	0.10	-0.08	0.27
Pass	**-4.60**	**480.67**	**<.001**	**-0.51**	**-0.73**	**-0.29**
Weakness	**2.60**	**522.78**	**0.010**	**0.30**	**0.07**	**0.53**
Exploit	**-2.21**	**733.00**	**0.028**	**-0.19**	**-0.36**	**-0.02**
Healthy	**-2.32**	**535.23**	**0.021**	**-0.20**	**-0.36**	**-0.03**
Social Support	**-6.49**	**535.00**	**<.001**	**-0.73**	**-0.95**	**-0.51**
RI	-0.87	552.57	0.39	-0.11	-0.35	0.13
PPS	0.75	513.36	0.45	0.09	-0.14	0.31
ME	-0.01	733.00	0.99	0.00	-0.22	0.22
D	0.85	733.00	0.40	0.10	-0.13	0.34
A/A	-0.28	733.00	0.78	-0.03	-0.28	0.21
AE	1.54	733.00	0.12	0.20	-0.06	0.47
CP	0.99	733.00	0.32	0.10	-0.10	0.30
LfH	**7.21**	**461.64**	**<.001**	**1.02**	**0.74**	**1.30**

Table A4.2

Correlations between Narcissism (Grandiose, Adaptive, Maladaptive, and Vulnerable), Mediators, and Coping Styles

	1.	2.	3.	4.	5.	6.	7.	8.	9.	1.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
1. GN	1																						
2. AN	.84***	1																					
3. MN	.84***	.51***	1																				
4. VN	.02	-.07	.13***	1																			
5. Weak	-.09*	-.12***	.01	.36***	1																		
6. Exploit	.20***	.06	.28***	.22***	.17***	1																	
7. Health	.07	.08*	.01	-.20***	-.60***	-.11**	1																
8. PASS	.14***	.15***	.04	-.31***	-.46***	-.06	.47***	1															
9. BIS	-.20***	-.27***	-.04	.47***	.20***	.02	-.03	-.11**	1														
10. BAS	.49***	.42***	.41***	.00	-.15***	.13***	.18***	.24***	.00	1													
11. I	.01	-.10**	.19***	.44***	.19***	.17***	-.12***	-.18***	.42***	.12**	1												
12. SE	.48***	.46***	.28***	-.06	-.26***	.13***	.27***	.36***	-.18***	.47***	-.09*	1											
13. SP	.09*	.00	.16***	.27***	.15***	.34***	-.12**	-.14***	.10**	.05	.23***	.15***	1										
14. O	.33***	.36***	.11**	-.37***	-.28***	-.00	.16***	.40***	-.40***	.32***	-.36	.50***	-.06	1									
15. SS	.07	.01	.07	-.05	-.28***	.12***	.36***	.46***	.14***	.25***	.10**	.34***	.05	.17***	1								
16. RI	-.03	-.09*	.08*	.23***	.22***	.17***	-.15***	-.20***	.19***	.04	.42***	-.11**	.24***	-.25***	.00	1							
17. PPS	.17***	.24***	.04	-.17***	-.21***	-.07	.22***	.24***	-.11**	.30***	-.15***	.39***	-.12**	.27***	.32***	-.13***							
18. ME	-.07	-.17***	.02	.32***	.26***	.14***	-.13***	-.21***	.34***	-.04	.30***	-.08*	.20***	-.25***	.11**	.30***	-.17***	1					
19. D	.10**	.08*	.05	-.10**	-.03	.08*	.02	.05	-.28***	.13***	-.12**	.19***	.08*	.17***	-.08*	-.02	.17***	-.03	1				
20. A	.09*	.00	.19***	.35***	.23***	.25***	-.19***	-.19***	.25***	.06	.44***	-.03	.25***	-.24***	.13***	.35***	-.13***	.33***	-.21***	1			
21. AE	.19***	.19***	.11**	-.04	-.06	.12**	.07	.06	-.11**	.28***	-.01	.24***	.15***	.19***	.16***	.08*	.12**	.08*	.21***	.04	1		
22. CP	.06	.11**	-.05	-.09*	-.05	-.04	.15***	.17***	-.09*	.14**	-.14***	.27***	-.11**	.14***	.26***	-.07	.33***	.08*	.30***	-.16***	.19***	1	
23. LfH	.17***	.21***	.03	-.02	-.11**	.05	.08*	.07	-.05	.14**	-.05	.30***	.15***	.17***	.22***	-.06	.20***	.03	.03	.05	.22***	.12**	1

Note. GN = Grandiose Narcissism; AN = Adaptive Narcissism; MN = Maladaptive Narcissism; VN = Vulnerable Narcissism; Weakness = Perception that asking social support is a weakness; Exploit = Perception that asking social support is an opportunity to manipulate and exploit others; Health = Perception that seeking social support is natural and healthy; PASS = Perceived Availability of Social Support; BIS = Behavioural Inhibition; BAS = Behavioural Approach; I = Impulsivity; SE = Self-enhancement; SP = Self-Protection; O = Optimism; SS = Social Support; RI = Risky Ingestion; PPS = Planful Problem Solving; ME = Mental Escapism; D = Downplaying; A = Anger/Aggression; CP = Considering Perspective; LfH = Looking for (spiritual) Help

*$p < .05$, **$p < .01$, ***$p < .001$

Table A4.3

*Results from A Second Stage Moderated Mediation Model with **Social Support Seeking (SS)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																			
	M_1: Weakness				M_2: Exploit				M_3: Health				M_4: PASS				Y: Social Support			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.46	<.001	3.04	3.87	1.64	<.001	1.32	1.96	6.44	<.001	6.13	6.75	4.98	<.001	4.59	5.38	-0.02	.97	-1.31	1.26
X: Narcissism	-0.95	.006	-1.62	-0.27	1.51	<.001	0.99	2.03	0.54	.034	0.04	1.04	1.39	<.001	0.76	2.03	-0.43	.34	-1.32	0.45
U_1: survey source	-0.32	.004	-0.54	-0.11	0.23	.008	0.06	0.39	0.21	.010	0.05	0.37	0.55	<.001	0.34	0.75	0.43	<.001	0.24	0.63
M_1: Weakness																	0.02	.72	-0.09	0.13
M_2: Exploit																	0.25	<.001	0.13	0.36
M_3: Health																	0.25	.001	0.10	0.40
M_4: PASS																	0.36	<.001	0.25	0.46
W: Condition																	0.36	.71	-1.56	2.29
XW: GN * Condition																	0.61	.32	-0.60	1.82
M_1W: Weakness * Condition																	-0.10	.25	-0.26	0.07
M_2W: Exploit * Condition																	-0.08	.35	-0.25	0.09
M_3W: Health * Condition																	0.00	.98	-0.22	0.22
M_4W: PASS * Condition																	0.00	.97	-0.16	0.15

Conditional Direct Effects of X on Y	*effect*	*p*	*CI*	
Control	-0.43	.34	-1.32	0.45
Self-Affirmation	0.17	.68	-0.65	1.00

Indirect effects via Mediators

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*	
Control	-0.02	-0.13	0.10	0.37	0.16	0.63	0.14	0.00	0.34	0.50	0.22	0.83
Self-Affirmation	0.07	-0.05	0.25	0.25	0.07	0.47	0.14	0.00	0.34	0.49	0.22	0.84

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.09	-0.08	0.30	-0.12	-0.38	0.13	0.00	-0.16	0.15	0.00	-0.25	0.26

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support

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Table A4.4

*Results from A Second Stage Moderated Mediation Model with **Social Support Seeking (SS)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																			
	M_1: Weakness				M_2: Exploit				M_3: Health				M_4: PASS				Y: Social Support			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.57	<.001	3.15	3.99	1.88	<.001	1.56	2.20	6.41	<.001	6.10	6.73	4.92	<.001	4.52	5.31	0.19	.77	-1.12	1.50
Adaptive Narcissism	-1.37	<.001	-1.94	-0.79	-0.49	.027	-0.93	-0.06	0.59	.007	0.16	1.02	1.40	<.001	0.86	1.94	-0.70	.049	-1.39	0.00
Maladaptive Narcissism	1.12	.005	0.34	1.89	2.34	<.001	1.75	2.94	-0.37	.21	-0.95	0.21	-0.69	.06	-1.43	0.04	0.34	.35	-0.37	1.04
U_1: survey source	-0.40	<.001	-0.62	-0.18	0.13	.14	-0.04	0.29	0.24	<.001	0.08	0.40	0.61	<.001	0.40	0.82	0.40	<.001	0.20	0.59
M_1: Weakness																	0.01	.87	-0.10	0.12
M_2: Exploit																	0.23	<.001	0.12	0.35
M_3: Health																	0.24	.002	0.09	0.39
M_4: PASS																	0.36	<.001	0.26	0.47
W: Condition																	0.20	.84	-1.73	2.13
XW: AN * Condition																	0.50	.25	-0.36	1.36
M_1W: Weakness * Condition																	-0.09	.30	-0.25	0.08
M_2W: Exploit * Condition																	-0.07	.40	-0.23	0.09
M_3W: Health * Condition																	0.01	.92	-0.21	0.23
M_4W: PASS * Condition																	0.00	1.00	-0.15	0.15

Conditional Direct Effects of X on Y	*Effect*	*p*	*CI*	
Control	-0.70	.05	-1.39	0.00
Self-Affirmation	-0.20	.55	-0.84	0.45

Indirect effects via Mediators

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*	
Control	-0.01	-0.17	0.15	-0.11	-0.24	-0.01	0.14	0.03	0.30	0.50	0.27	0.79
Self-Affirmation	0.11	-0.07	0.32	-0.08	-0.19	-0.01	0.15	0.03	0.32	0.51	0.26	0.81

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.12	-0.12	0.38	0.03	-0.05	0.14	0.01	-0.14	0.17	0.00	-0.24	0.26

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support

Appendix A – Tables Chapter 4

Table A4.5

*Results from A Second Stage Moderated Mediation Model with **Social Support Seeking (SS)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																	
	M_1: Weakness				M_2: Exploit				M_3: Health				M_4: PASS				Y: Social Support			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.57	<.001	3.15	3.99	1.88	<.001	1.56	2.20	6.41	<.001	6.10	6.73	4.92	<.001	4.52	5.31	0.09	.90	-1.21	1.38
Adaptive Narcissism	-1.37	<.001	-1.94	-0.79	-0.49	.027	-0.93	-0.06	0.59	.007	0.16	1.02	1.40	<.001	0.86	1.94	-0.43	.10	-0.94	0.08
Maladaptive Narcissism	1.12	.005	0.34	1.89	2.34	<.001	1.75	2.94	-0.37	.21	-0.95	0.21	-0.69	.06	-1.43	0.04	0.13	.79	-0.81	1.06
U_1: survey source	-0.40	<.001	-0.62	-0.18	0.13	.14	-0.04	0.29	0.24	<.001	0.08	0.40	0.61	<.001	0.40	0.82	0.40	<.001	0.21	0.60
M_1: Weakness																	0.01	.79	-0.09	0.12
M_2: Exploit																	0.24	<.001	0.12	0.36
M_3: Health																	0.25	.001	0.10	0.40
M_4: PASS																	0.36	<.001	0.25	0.46
W: Condition																	0.30	.76	-1.62	2.23
XW: MN * Condition																	0.42	.50	-0.79	1.63
M_1W: Weakness * Condition																	-0.09	.26	-0.26	0.07
M_2W: Exploit * Condition																	-0.08	.36	-0.25	0.09
M_3W: Health * Condition																	0.01	.95	-0.22	0.23
M_4W: PASS * Condition																	0.01	.93	-0.14	0.16

Conditional Direct Effects of X on Y

	Effect	*p*	*CI*	
Control	0.13	.79	-0.81	1.06
Self-Affirmation	0.54	.25	-0.38	1.47

Indirect effects via Mediators

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*	
Control	0.02	-0.11	0.17	0.56	0.26	0.91	-0.09	-0.27	0.05	-0.25	-0.55	0.03
Self-Affirmation	-0.09	-0.29	0.06	0.37	0.11	0.69	-0.09	-0.29	0.05	-0.25	-0.58	0.03

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.10	-0.37	0.09	-0.18	-0.59	0.21	0.00	-0.14	0.11	-0.01	-0.17	0.14

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support

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Table A4.6

*Results from A Second Stage Moderated Mediation Model with **Social Support Seeking (SS)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																	
	M_1: Weakness				M_2: Exploit				M_3: Health				M_4: PASS				Y: Social Support			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	1.02	<.001	0.49	1.55	1.03	<.001	0.60	1.46	7.47	<.001	7.06	7.88	7.10	<.001	6.59	7.62	-0.58	.40	-1.93	0.76
X: Narcissism	0.47	<.001	0.38	0.56	0.23	<.001	0.16	0.31	-0.19	<.001	-0.26	-0.12	-0.38	<.001	-0.46	-0.29	0.13	.047	0.00	0.25
U_1: survey source	-0.20	.05	-0.41	0.00	0.24	.005	0.07	0.40	0.16	.050	0.00	0.31	0.44	<.001	0.25	0.64	0.45	<.001	0.26	0.64
M_1: Weakness																	0.00	.98	-0.11	0.11
M_2: Exploit																	0.21	<.001	0.10	0.33
M_3: Health																	0.25	.001	0.10	0.40
M_4: PASS																	0.36	<.001	0.26	0.47
W: Condition																	0.39	.70	-1.61	2.40
XW: VN * Condition																	0.03	.75	-0.15	0.21
M_1W: Weakness * Condition																	-0.12	.15	-0.29	0.05
M_2W: Exploit * Condition																	-0.07	.40	-0.24	0.09
M_3W: Health * Condition																	-0.02	.86	-0.24	0.20
M_4W: PASS * Condition																	0.03	.75	-0.13	0.18

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	0.13	.047	0.00	0.25
Self-Affirmation	0.16	.022	0.02	0.29

Indirect effects via Mediators

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*	
Control	0.00	-0.05	0.06	0.05	0.02	0.08	-0.05	-0.08	-0.02	-0.14	-0.20	-0.09
Self-Affirmation	-0.06	-0.13	0.01	0.03	0.01	0.06	-0.04	-0.08	-0.01	-0.15	-0.21	-0.09

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.06	-0.15	0.02	-0.02	-0.06	0.02	0.00	-0.04	0.05	-0.01	-0.08	0.06

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support

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Table A4.7

*Results from A Second Stage Moderated Mediation Model with **Risky Ingestion (RI)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable															
	M_1: Impulsivity				M_2: Self-Protection				M_3: Self-Enhancement				Y: Risky Ingestion			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.38	<.001	4.15	4.61	2.97	<.001	2.63	3.30	4.12	<.001	3.99	4.25	1.26	.008	0.34	2.18
X: Narcissism	0.18	.64	-0.57	0.93	0.63	.026	0.08	1.18	3.16	<.001	2.74	3.57	-1.05	.06	-2.14	0.04
U_1: survey source					-0.16	.07	-0.34	0.01								
M_1: Impulsivity													0.35	<.001	0.26	0.45
M_2: Self-Protection													0.34	<.001	0.21	0.47
M_3: Self-Enhancement													-0.16	.07	-0.34	0.01
W: Condition													0.13	.84	-1.12	1.38
XW: GN * Condition													2.23	.004	0.73	3.73
M_1W: Impulsivity * Condition													0.01	.87	-0.12	0.14
M2W: Self-Protection * Condition													-0.19	.042	-0.37	-0.01
M3W: Self-Enhancement * Condition													-0.03	.77	-0.27	0.20

Conditional Direct Effects of X on Y	*Effect*	*p*	*CI*	
Control	-1.05	.06	-2.14	0.04
Self-Affirmation	1.18	.026	0.14	2.21

Indirect effects via Mediators

	M_1: Impulsivity			M_2: Self-Protection			M_3: Self-Enhancement		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*	
Control	0.06	-0.21	0.35	0.21	0.03	0.45	-0.51	-1.15	0.09
Self-Affirmation	0.07	-0.22	0.36	0.10	0.00	0.24	-0.62	-1.16	-0.07

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.00	-0.06	0.07	-0.12	-0.32	0.01	-0.11	-0.90	0.71

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples)

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Table A4.8

*Results from A Second Stage Moderated Mediation Model with **Risky Ingestion (RI)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable															
	M_1: Impulsivity				M_2: Self-Protection				M_3: Self-Enhancement				Y: Risky Ingestion			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	1.38	.003	0.46	2.30
Adaptive Narcissism	-1.87	<.001	-2.47	-1.27	-0.74	.002	-1.21	-0.28	2.06	<.001	1.70	2.41	-0.73	.08	-1.55	0.10
Maladaptive Narcissism	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	.13	-0.11	0.86	0.31	.45	0.45	0.45
U_1: survey source					-0.25	.005	-0.43	-0.08								
M_1: Impulsivity													0.33	<.001	0.24	0.43
M_2: Self-Protection													0.33	<.001	0.19	0.46
M_3: Self-Enhancement													-0.18	.041	-0.35	-0.01
W: Condition													-0.06	.93	-1.30	1.18
XW: AN * Condition													1.15	.036	0.08	2.23
M_1W: Impulsivity * Condition													0.03	.64	-0.10	0.16
M_2W: Self-Protection * Condition													-0.17	.06	-0.35	0.01
M_3W: Self-Enhancement * Condition													0.02	.89	-0.22	0.25

Conditional Direct Effects of X on Y	*Effect*	*p*	*CI*	
Control	-0.73	.08	-1.55	0.10
Self-Affirmation	0.43	.30	-0.38	1.24

Indirect effects via Mediators	M_1: Impulsivity			M_2: Self-Protection			M_3: Self-Enhancement		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*	
Control	-0.63	-0.93	-0.37	-0.24	-0.43	-0.09	-0.37	-0.80	0.01
Self-Affirmation	-0.69	-1.00	-0.41	-0.11	-0.26	-0.01	-0.34	-0.70	0.02

Index of moderated mediation(difference between conditional indirect effects)	Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.06	-0.32	0.20	0.13	-0.01	0.31	0.03	-0.48	0.58

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples)

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Table A4.9

*Results from A Second Stage Moderated Mediation Model with **Risky Ingestion (RI)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable															
	M_1: Impulsivity				M_2: Self-Protection				M_3: Self-Enhancement				Y: Risky Ingestion			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	1.33	.005	0.41	2.25
Adaptive Narcissism	-1.87	<.001	-2.47	-1.27	-0.74	.002	-1.21	-0.28	2.06	<.001	1.70	2.41	-0.14	.66	-0.75	0.48
Maladaptive Narcissism	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	.13	-0.11	0.86	-0.53	.33	-1.60	0.54
U_1: survey source					-0.25	.005	-0.43	-0.08								
M_1: Impulsivity													0.36	<.001	0.26	0.45
M_2: Self-Protection													0.34	<.001	0.21	0.48
M_3: Self-Enhancement													-0.20	.017	-0.37	-0.04
W: Condition													0.03	.96	-1.22	1.28
XW: MN * Condition													1.63	.022	0.24	3.03
M_1W: Impulsivity * Condition													-0.01	.93	-0.14	0.13
M2W: Self-Protection * Condition													-0.20	.029	-0.38	-0.02
M3W: Self-Enhancement * Condition													0.06	.58	-0.16	0.28

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	-0.53	.33	-1.60	0.54
Self-Affirmation	1.10	.039	0.06	2.14

Indirect effects via Mediators

	M_1: Impulsivity			M_2: Self-Protection			M_3: Self-Enhancement		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*	
Control	1.16	0.77	1.62	0.60	0.30	0.95	-0.08	-0.23	0.02
Self-Affirmation	1.14	0.74	1.59	0.24	0.02	0.51	-0.05	-0.18	0.02

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.02	-0.48	0.42	-0.35	-0.75	-0.02	0.02	-0.08	0.15

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples)

Appendix A – Tables Chapter 4

Table A4.10

*Results from A Second Stage Moderated Mediation Model with **Risky Ingestion (RI)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable															
	M_1: Impulsivity				M_2: Self-Protection				M_3: Self-Enhancement				Y: Risky Ingestion			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	1.73	<.001	1.32	2.14	1.88	<.001	1.44	2.32	5.20	<.001	4.91	5.49	1.46	.003	0.48	2.43
X: Narcissism	0.64	<.001	0.55	0.73	0.29	<.001	0.21	0.36	-0.06	.09	-0.12	0.01	-0.02	.81	-0.17	0.13
U_1: survey source					-0.14	.11	-0.31	0.03								
M_1: Impulsivity													0.35	<.001	0.25	0.45
M_2: Self-Protection													0.34	<.001	0.20	0.47
M_3: Self-Enhancement													-0.24	.003	-0.39	-0.08
W: Condition													-0.50	.48	-1.87	0.88
XW: VN * Condition													0.11	.32	-0.10	0.32
M_1W: Impulsivity * Condition													0.00	1.00	-0.15	0.14
M2W: Self-Protection * Condition													-0.21	.024	-0.40	-0.03
M3W: Self-Enhancement * Condition													0.14	.18	-0.07	0.35

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	-0.02	.81	-0.17	0.13
Self-Affirmation	0.09	.24	-0.06	0.24

Indirect effects via Mediators

	M_1: Impulsivity			M_2: Self-Protection			M_3: Self-Enhancement		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*	
Control	0.22	0.15	0.30	0.10	0.05	0.14	0.01	0.00	0.04
Self-Affirmation	0.22	0.15	0.31	0.04	0.00	0.08	0.01	0.00	0.02

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.00	-0.10	0.10	-0.06	-0.12	-0.01	-0.01	-0.03	0.01

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples)

Appendix A – Tables Chapter 4

Table A4.11

*Results from A Second Stage Moderated Mediation Model with **Planful Problem Solving (PPS)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BAS				M_2: I				M_3: SP				M_4: SE				M_5: O				Y: PPS			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.77	<.001	4.64	4.91	4.39	<.001	4.16	4.62	2.96	<.001	2.62	3.30	4.12	<.001	3.99	4.24	3.80	<.001	3.61	3.99	2.50	<.001	1.50	3.50
X: Narcissism	3.36	<.001	2.93	3.80	0.16	.68	-0.60	0.91	0.62	.029	0.06	1.17	3.15	<.001	2.73	3.57	2.93	<.001	2.31	3.55	-0.81	.14	-1.88	0.27
U_1: survey source									-0.16	.08	-0.34	0.02												
M_1: BAS																					0.18	.028	0.02	0.34
M_2: Impulsivity																					-0.02	.71	-0.12	0.08
M_3: Self-Protection																					-0.20	.002	-0.32	-0.07
M_4: Self-Enhancement																					0.53	<.001	0.35	0.70
M_5: Optimism																					0.09	.16	-0.04	0.22
W: Condition																					0.63	.37	-0.76	2.02
XW: GN * Condition																					0.14	.85	-1.34	1.61
M_1W: BAS * Condition																					0.12	.27	-0.10	0.34
M_2W: Impulsivity * Condition																					-0.12	.08	-0.26	0.02
M3W: Self-Protection * Condition																					0.04	.67	-0.13	0.20
M4W: Self-Enhancement * Condition																					-0.07	.60	-0.31	0.18
M_5W: Optimism * Condition																					-0.11	.22	-0.28	0.07

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	-0.81	.14	-1.88	0.27
Self-Affirmation	-0.67	.19	-1.68	0.34

Indirect Effects via Mediators

	M_1: BAS				M_2: I				M_3: SP				M_4: SE				M_5: O			
	a_1b_1	*CI*			a_2b_2	*CI*			a_3b_3	*CI*			a_4b_4	*CI*			a_4b_4	*CI*		
Control	0.60	-0.01	1.22		0.00	-0.07	0.06		-0.12	-0.27	-0.01		1.66	0.99	2.42		0.27	-0.18	0.77	
Self-Affirmation	1.01	0.48	1.57		-0.02	-0.15	0.10		-0.10	-0.22	-0.01		1.45	0.85	2.09		-0.04	-0.41	0.31	

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*			Index	*CI*			Index	*CI*			Index	*CI*			Index	*CI*		
Condition	0.41	-0.40	1.21		-0.02	-0.16	0.09		0.02	-0.09	0.15		-0.21	-1.12	0.63		-0.31	-0.94	0.26	

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

Appendix A – Tables Chapter 4

Table A4.12

*Results from A Second Stage Moderated Mediation Model with **Planful Problem Solving (PPS)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BAS				M_2: I				M_3: SP				M_4: SE				M_5: O				Y: PPS			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.81	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.82	3.50	4.18	<.001	4.05	4.30	3.87	<.001	3.68	4.06	2.55	<.001	1.57	3.53
Adaptive Narcissism	1.40	<.001	1.03	1.77	-1.89	<.001	-2.49	-1.29	-0.77	.001	-1.23	-0.30	2.04	<.001	1.68	2.39	2.66	<.001	2.14	3.18	0.21	.59	-0.57	0.99
Maladaptive Narcissism	1.84	<.001	1.34	2.35	3.24	<.001	2.41	4.06	1.77	<.001	1.14	2.40	0.39	.11	-0.09	0.88	-0.95	.008	-1.65	-0.24	-1.00	.009	0.01	0.01
U_1: survey source									-0.24	.006	-0.42	-0.07												
M_1: BAS																					0.18	.022	0.03	0.34
M_2: Impulsivity																					-0.01	.86	-0.11	0.09
M_3: Self-Protection																					-0.19	.003	-0.31	-0.06
M_4: Self-Enhancement																					0.50	<.001	0.32	0.67
M_5: Optimism																					0.07	.26	-0.06	0.20
W: Condition																					0.68	.32	-0.67	2.04
XW: AN * Condition																					0.40	.45	-0.64	1.43
M_1W: BAS * Condition																					0.10	.37	-0.12	0.32
M_2W: Impulsivity * Condition																					-0.12	.09	-0.25	0.02
M3W: Self-Protection * Condition																					0.04	.62	-0.13	0.21
M4W: Self-Enhancement * Condition																					-0.08	.51	-0.33	0.16
M_5W: Optimism * Condition																					-0.10	.24	-0.28	0.07

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	0.21	.59	-0.57	0.99
Self-Affirmation	0.61	.12	-0.15	1.37

Indirect Effects via Mediators

	M_1: BAS			M_2: I			M_3: SP			M_4: SE			M_5: O		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_3b_3	*CI*		a_3b_3	*CI*	
Control	0.26	0.01	0.54	0.02	-0.22	0.26	0.14	0.03	0.29	1.01	0.58	1.51	0.20	-0.21	0.64
Self-Affirmation	0.40	0.17	0.66	0.23	0.05	0.45	0.11	0.02	0.24	0.84	0.44	1.28	-0.08	-0.40	0.24

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.14	-0.20	0.48	0.22	-0.07	0.53	-0.03	-0.18	0.10	-0.17	-0.76	0.37	-0.27	-0.83	0.24

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

Table A4.13

*Results from A Second Stage Moderated Mediation Model with **Planful Problem Solving (PPS)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BAS				M_2: I				M_3: SP				M_4: SE				M_5: O				Y: PPS			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.81	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.82	3.50	4.18	<.001	4.05	4.30	3.87	<.001	3.68	4.06	2.58	<.001	1.59	3.57
Adaptive Narcissism	1.40	<.001	1.03	1.77	-1.89	<.001	-2.49	-1.29	-0.77	.001	-1.23	-0.30	2.04	<.001	1.68	2.39	2.66	<.001	2.14	3.18	0.42	.15	-0.15	0.99
Maladaptive Narcissism	1.84	<.001	1.34	2.35	3.24	<.001	2.41	4.06	1.77	<.001	1.14	2.40	0.39	.11	-0.09	0.88	-0.95	.008	-1.65	-0.24	-1.11	.034	-2.14	-0.08
U_1: survey source									-0.24	.006	-0.42	-0.07												
M_1: BAS																					0.18	.027	0.02	0.34
M_2: Impulsivity																					-0.01	.90	-0.11	0.10
M_3: Self-Protection																					-0.19	.004	-0.31	-0.06
M_4: Self-Enhancement																					0.49	<.001	0.31	0.66
M_5: Optimism																					0.07	.29	-0.06	0.20
W: Condition																					0.63	.36	-0.73	1.99
XW: MN* Condition																					0.23	.74	-1.12	1.58
M_1W: BAS * Condition																					0.11	.34	-0.11	0.33
M_2W: Impulsivity * Condition																					-0.12	.08	-0.26	0.02
M3W: Self-Protection * Condition																					0.04	.67	-0.13	0.20
M4W: Self-Enhancement * Condition																					-0.06	.60	-0.30	0.18
M_5W: Optimism * Condition																					-0.10	.27	-0.27	0.08

Conditional Direct Effects of X on Y	*Effect*	*p*	*CI*	
Control	-1.11	.034	-2.14	-0.08
Self-Affirmation	-0.88	.08	-1.87	0.10

Indirect Effects via Mediators

	M_1: BAS			M_2: I			M_3: SP			M_4: SE			M_5: O		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_3b_3	*CI*		a_3b_3	*CI*	
Control	0.33	0.00	0.68	-0.02	-0.42	0.40	-0.33	-0.60	-0.10	0.19	-0.04	0.46	-0.07	-0.26	0.08
Self-Affirmation	0.53	0.23	0.88	-0.41	-0.75	-0.09	-0.26	-0.49	-0.06	0.17	-0.04	0.40	0.03	-0.10	0.16

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.20	-0.23	0.65	-0.39	-0.93	0.11	0.06	-0.24	0.37	-0.02	-0.18	0.09	0.09	-0.10	0.33

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

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Table A4.14

*Results from A Second Stage Moderated Mediation Model with **Planful Problem Solving (PPS)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																			
	M_1: BAS				M_2: I				M_3: SP				M_4: SE				M_5: O				Y: PPS			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	5.66	<.001	5.36	5.97	1.73	<.001	1.32	2.14	1.88	<.001	1.43	2.32	5.21	<.001	4.92	5.50	6.53	<.001	6.15	6.90	3.16	<.001	2.11	4.22
X: Narcissism	0.00	.99	-0.07	0.07	0.64	<.001	0.55	0.73	0.29	<.001	0.21	0.36	-0.06	.07	-0.13	0.01	-0.46	<.001	-0.55	-0.38	-0.14	.06	-0.28	0.01
U_1: survey source									-0.13	.13	-0.30	0.04												
M_1: BAS																					0.13	.10	-0.02	0.28
M_2: Impulsivity																					0.01	.85	-0.10	0.12
M_3: Self-Protection																					-0.18	.004	-0.31	-0.06
M_4: Self-Enhancement																					0.52	<.001	0.35	0.69
M_5: Optimism																					0.06	.41	-0.08	0.19
W: Condition																					0.52	.49	-0.95	2.00
XW: VN * Condition																					0.02	.82	-0.18	0.22
M_1W: BAS * Condition																					0.16	.15	-0.05	0.37
M_2W: Impulsivity * Condition																					-0.13	.08	-0.27	0.02
M3W: Self-Protection * Condition																					0.04	.67	-0.13	0.21
M4W: Self-Enhancement * Condition																					-0.09	.44	-0.33	0.14
M_5W: Optimism * Condition																					-0.10	.26	-0.28	0.08

Conditional Direct Effects of X on Y	*Effect*	*p*	*CI*	
Control	-0.14	.06	-0.28	0.01
Self-Affirmation	-0.11	.12	-0.25	0.03

Indirect Effects via Mediators

	M_1: BAS			M_2: I			M_3: SP			M_4: SE			M_5: O		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*		a_4b_4	*CI*	
Control	0.00	-0.01	0.01	0.01	-0.08	0.09	-0.05	-0.09	-0.02	-0.03	-0.08	0.01	-0.03	-0.10	0.05
Self-Affirmation	0.00	-0.02	0.02	-0.07	-0.14	-0.01	-0.04	-0.08	-0.01	-0.03	-0.06	0.01	0.02	-0.04	0.08

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.00	-0.02	0.02	-0.08	-0.19	0.02	0.01	-0.04	0.06	0.01	-0.01	0.03	0.05	-0.04	0.14

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

Table A4.15

*Results from A Second Stage Moderated Mediation Model with **Mental Escapism (ME)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: SP				M_4: SE				M_5: O				Y: Mental Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.47	<.001	6.27	6.68	4.77	<.001	4.64	4.91	2.96	<.001	2.62	3.30	4.12	<.001	3.99	4.24	3.80	<.001	3.61	3.99	3.55	<.001	2.37	4.74
X: Narcissism	-1.87	<.001	-2.54	-1.20	3.36	<.001	2.93	3.80	0.62	.029	0.06	1.17	3.15	<.001	2.73	3.57	2.93	<.001	2.31	3.55	-0.32	.59	-1.48	0.85
U_1: survey source									-0.16	.08	-0.34	0.02												
M_1: BIS																					0.27	<.001	0.16	0.38
M_2: BAS																					-0.08	.34	-0.24	0.08
M_3: Self-Protection																					0.27	<.001	0.14	0.40
M_4: Self-Enhancement																					0.02	.82	-0.17	0.21
M_5: Optimism																					-0.10	.11	-0.23	0.03
W: Condition																					-0.27	.75	-1.94	1.40
XW: GN* Condition																					1.18	.14	-0.40	2.77
M_1W: BIS * Condition																					0.02	.83	-0.14	0.17
M_2W: BAS * Condition																					0.09	.44	-0.14	0.32
M_3W: Self-Protection * Condition																					-0.10	.28	-0.27	0.08
M_4W: Self-Enhancement * Condition																					-0.02	.90	-0.28	0.24
M_5W: Optimism * Condition																					-0.06	.49	-0.24	0.12

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	-0.32	.59	-1.48	0.85
Self-Affirmation	0.86	.12	-0.21	1.94

Indirect Effects via Mediators

	M_1: BIS			M_2: BAS			M_3: SP			M_4: SE			M_5: O		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*		a_4b_4	*CI*	
Control	-0.51	-0.85	-0.22	-0.27	-0.86	0.30	0.17	0.02	0.36	0.07	-0.69	0.81	-0.30	-0.77	0.13
Self-Affirmation	-0.54	-0.88	-0.26	0.04	-0.51	0.59	0.11	0.01	0.24	0.02	-0.51	0.54	-0.49	-0.85	-0.16

Index of moderated mediation (difference between conditional indirect effects):

	M_1: BIS			M_2: BAS			M_3: SP			M_4: SE			M_5: O		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.03	-0.36	0.28	0.31	-0.49	1.11	-0.06	-0.21	0.05	-0.05	-0.95	0.89	-0.19	-0.74	0.38

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

Appendix A – Tables Chapter 4

Table A4.16

*Results from A Second Stage Moderated Mediation Model with **Mental Escapism (ME)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: SP				M_4: SE				M_5: O				Y: Mental Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.51	<.001	6.31	6.71	4.81	<.001	4.67	4.94	3.16	<.001	2.82	3.50	4.18	<.001	4.05	4.30	3.87	<.001	3.68	4.06	3.58	<.001	2.41	4.75
Adaptive Narcissism	-2.31	<.001	-2.86	-1.76	1.40	<.001	1.03	1.77	-0.77	.001	-1.23	-0.30	2.04	<.001	1.68	2.39	2.66	<.001	2.14	3.18	-1.27	.004	-2.11	-0.42
Maladaptive Narcissism	1.24	.001	0.49	2.00	1.84	<.001	1.34	2.35	1.77	<.001	1.14	2.40	0.39	.11	-0.09	0.88	-0.95	.008	-1.65	-0.24	0.70	.08	0.08	0.08
U_1: survey source									-0.24	.006	-0.42	-0.07												
M_1: BIS																					0.25	<.001	0.14	0.35
M_2: BAS																					-0.08	.36	-0.24	0.09
M_3: Self-Protection																					0.25	<.001	0.12	0.38
M_4: Self-Enhancement																					0.07	.47	-0.12	0.26
M_5: Optimism																					-0.08	.24	-0.21	0.05
W: Condition																					-0.34	.68	-1.99	1.31
XW: AN * Condition																					1.17	.041	0.05	2.28
M_1W: BIS * Condition																					0.03	.69	-0.12	0.18
M_2W: BAS * Condition																					0.10	.39	-0.13	0.32
M_3W: Self-Protection * Condition																					-0.08	.35	-0.26	0.09
M_4W: Self-Enhancement * Condition																					-0.03	.80	-0.29	0.23
M_5W: Optimism * Condition																					-0.08	.37	-0.26	0.10

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	-1.27	.004	-2.11	-0.42
Self-Affirmation	-0.10	.81	-0.91	0.72

Indirect Effects via Mediators

	M_1: BIS			M_2: BAS			M_3: SP			M_4: SE			M_5: O		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_3b_3	*CI*		a_3b_3	*CI*	
Control	-0.57	-0.91	-0.25	-0.11	-0.35	0.12	-0.19	-0.37	-0.05	0.14	-0.31	0.59	-0.20	-0.64	0.20
Self-Affirmation	-0.64	-0.97	-0.36	0.03	-0.19	0.27	-0.12	-0.25	-0.03	0.07	-0.27	0.42	-0.42	-0.75	-0.12

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.07	-0.46	0.30	0.14	-0.18	0.48	0.06	-0.07	0.23	-0.07	-0.63	0.50	-0.22	-0.72	0.30

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

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Table A4.17

*Results from A Second Stage Moderated Mediation Model with **Mental Escapism (ME)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																			
	M_1: BIS				M_2: BAS				M_3: SP				M_4: SE				M_5: O				Y: Mental Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.51	<.001	6.31	6.71	4.81	<.001	4.67	4.94	3.16	<.001	2.82	3.50	4.18	<.001	4.05	4.30	3.87	<.001	3.68	4.06	3.57	<.001	2.39	4.75
Adaptive Narcissism	-2.31	<.001	-2.86	-1.76	1.40	<.001	1.03	1.77	-0.77	.001	-1.23	-0.30	2.04	<.001	1.68	2.39	2.66	<.001	2.14	3.18	-0.66	.04	-1.28	-0.05
Maladaptive Narcissism	1.24	.001	0.49	2.00	1.84	<.001	1.34	2.35	1.77	<.001	1.14	2.40	0.39	.11	-0.09	0.88	-0.95	.008	-1.65	-0.24	0.18	.75	-0.91	1.26
U_1: survey source									-0.24	.006	-0.42	-0.07												
M_1: BIS																					0.26	<.001	0.15	0.37
M_2: BAS																					-0.07	.39	-0.24	0.09
M_3: Self-Protection																					0.26	<.001	0.13	0.39
M_4: Self-Enhancement																					0.04	.65	-0.14	0.23
M_5: Optimism																					-0.09	.16	-0.22	0.04
W: Condition																					-0.31	.72	-1.97	1.35
XW: MN * Condition																					1.03	.16	-0.40	2.45
M_1W: BIS * Condition																					0.00	.95	-0.15	0.16
M_2W: BAS * Condition																					0.10	.38	-0.13	0.34
M_3W: Self-Protection * Condition																					-0.11	.23	-0.28	0.07
M_4W: Self-Enhancement * Condition																					0.02	.89	-0.23	0.27
M_5W: Optimism * Condition																					-0.06	.50	-0.24	0.12

Conditional Direct Effects of X on Y	*Effect*	*p*	*CI*	
Control	0.18	.75	-0.91	1.26
Self-Affirmation	1.20	.02	0.17	2.23

Indirect Effects via Mediators

	M_1: BIS			M_2: BAS			M_3: SP			M_4: SE			M_5: O		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_3b_3	*CI*		a_3b_3	*CI*	
Control	0.32	0.10	0.60	-0.14	-0.46	0.19	0.46	0.19	0.80	0.02	-0.08	0.15	0.09	-0.06	0.30
Self-Affirmation	0.33	0.11	0.60	0.06	-0.26	0.37	0.27	0.08	0.49	0.02	-0.05	0.12	0.15	0.01	0.33

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.01	-0.20	0.23	0.19	-0.26	0.65	-0.19	-0.54	0.12	0.01	-0.14	0.15	0.06	-0.14	0.29

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

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Table A4.18

*Results from A Second Stage Moderated Mediation Model with **Mental Escapism (ME)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: SP				M_4: SE				M_5: O				Y: Mental Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.35	<.001	2.98	3.72	5.66	<.001	5.36	5.97	1.88	<.001	1.43	2.32	5.21	<.001	4.92	5.50	6.53	<.001	6.15	6.90	3.08	<.001	1.87	4.30
X: Narcissism	0.62	<.001	0.54	0.71	0.00	.99	-0.07	0.07	0.29	<.001	0.21	0.36	-0.06	.07	-0.13	0.01	-0.46	<.001	-0.55	-0.38	0.22	.004	0.07	0.38
U_1: survey source									-0.13	.13	-0.30	0.04												
M_1: BIS																					0.22	<.001	0.10	0.33
M_2: BAS																					-0.09	.23	-0.24	0.06
M_3: Self-Protection																					0.23	<.001	0.10	0.36
M_4: Self-Enhancement																					-0.04	.70	-0.22	0.15
M_5: Optimism																					-0.05	.46	-0.18	0.08
W: Condition																					-0.35	.69	-2.06	1.36
XW: VN * Condition																					-0.07	.54	-0.29	0.15
M_1W: BIS * Condition																					0.02	.81	-0.14	0.18
M_2W: BAS * Condition																					0.13	.23	-0.08	0.35
M_3W: Self-Protection * Condition																					-0.09	.34	-0.27	0.09
M_4W: Self-Enhancement * Condition																					0.08	.51	-0.17	0.34
M_5W: Optimism * Condition																					-0.09	.36	-0.27	0.10

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	0.22	.004	0.07	0.38
Self-Affirmation	0.16	.05	0.00	0.31

Indirect Effects via Mediators

	M_1: BIS			M_2: BAS			M_3: SP			M_4: SE			M_5: O		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*		a_5b_5	*CI*	
Control	0.14	0.05	0.22	0.00	-0.01	0.01	0.07	0.02	0.12	0.00	-0.01	0.02	0.02	-0.05	0.10
Self-Affirmation	0.15	0.07	0.23	0.00	-0.01	0.01	0.04	0.01	0.08	0.00	-0.02	0.01	0.06	0.01	0.12

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.01	-0.10	0.12	0.00	-0.01	0.01	-0.02	-0.08	0.03	-0.01	-0.03	0.01	0.04	-0.05	0.13

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

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Table A4.19

*Results from A Second Stage Moderated Mediation Model with **Downplaying (D)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				M_6: O				Y: Downplaying			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.47	<.001	6.27	6.68	4.77	<.001	4.64	4.91	4.39	<.001	4.16	4.62	2.96	<.001	2.62	3.30	4.12	<.001	3.99	4.24	3.80	<.001	3.61	3.99	5.10	<.001	3.78	6.42
X: Narcissism	-1.87	<.001	-2.54	-1.20	3.36	<.001	2.93	3.80	0.16	.68	-0.60	0.91	0.62	.03	0.06	1.17	3.15	<.001	2.73	3.57	2.93	<.001	2.31	3.55	-1.16	.08	-2.45	0.12
U_1: survey source													-0.16	.08	-0.34	0.02												
M_1: BIS																									-0.39	<.001	-0.52	-0.26
M_2: BAS																									0.12	.20	-0.06	0.31
M_3:Impulsivity																									-0.02	.74	-0.15	0.10
M_4: Self-Protection																									0.12	.10	-0.02	0.26
M_5: Self-Enhancement																									0.11	.28	-0.09	0.32
M_6: Optimism																									-0.01	.93	-0.16	0.15
W: Condition																									-2.23	.019	-4.09	-0.37
XW: GN * Condition																									0.64	.47	-1.11	2.38
M_1W: BIS * Condition																									0.17	.05	0.00	0.35
M_2W: BAS * Condition																									0.07	.60	-0.19	0.33
M_3W: Impulsivity * Condition																									0.02	.81	-0.15	0.19
M4W: Self-Protection * Condition																									0.00	.97	-0.20	0.19
M5W: Self-Enhancement * Condition																									0.18	.23	-0.11	0.46
M_6W: Optimism * Condition																									-0.03	.78	-0.24	0.18

Conditional Direct Effects of X on Y	*Effect*	*p*	*CI*	
Control	-1.16	.08	-2.45	0.12
Self-Affirmation	-0.52	.38	-1.71	0.66

Indirect Effects via Mediators

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE			M_6: O		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*		a_5b_5	*CI*		a_6b_6	*CI*	
Control	0.73	0.38	1.14	0.41	-0.23	1.04	0.00	-0.08	0.05	0.07	-0.02	0.21	0.36	-0.32	1.03	-0.02	-0.47	0.43
Self-Affirmation	0.41	0.14	0.74	0.64	-0.01	1.29	0.00	-0.06	0.05	0.07	-0.01	0.20	0.91	0.20	1.64	-0.10	-0.54	0.33

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.32	-0.75	0.03	0.23	-0.68	1.15	0.00	-0.07	0.10	0.00	-0.15	0.13	0.55	-0.43	1.54	-0.09	-0.71	0.55

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

Appendix A – Tables Chapter 4

Table A4.20

*Results from A Second Stage Moderated Mediation Model with **Downplaying (D)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				M_6: O				Y: Downplaying			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.51	<.001	6.31	6.71	4.81	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.82	3.50	4.18	<.001	4.05	4.30	3.87	<.001	3.68	4.06	5.16	<.001	3.86	6.47
Adaptive Narcissism	-2.31	<.001	-2.86	-1.76	1.40	<.001	1.03	1.77	-1.89	<.001	-2.49	-1.29	-0.77	.001	-1.23	-0.30	2.04	<.001	1.68	2.39	2.66	<.001	2.14	3.18	-1.54	.001	-2.47	-0.62
Maladaptive Narcissism	1.24	.001	0.49	2.00	1.84	<.001	1.34	2.35	3.24	<.001	2.41	4.06	1.77	<.001	1.14	2.40	0.39	.11	-0.09	0.88	-0.95	<.001	-1.65	-0.24	0.03	.94	0.94	0.94
U_1: survey source													-0.24	.006	-0.42	-0.07												
M_1: BIS																									-0.42	<.001	-0.54	-0.29
M_2: BAS																									0.14	.13	-0.04	0.33
M_3:Impulsivity																									-0.03	.68	-0.15	0.10
M_4: Self-Protection																									0.10	.16	-0.04	0.25
M_5: Self-Enhancement																									0.15	.15	-0.05	0.36
M_6: Optimism																									0.01	.91	-0.14	0.16
W: Condition																									-2.23	.017	-4.06	-0.40
XW: AN * Condition																									1.19	.06	-0.04	2.41
M_1W: BIS * Condition																									0.20	.028	0.02	0.37
M_2W: BAS * Condition																									0.04	.74	-0.21	0.30
M_3W: Impulsivity * Condition																									0.02	.80	-0.14	0.19
M4W: Self-Protection * Condition																									0.01	.93	-0.19	0.20
M5W: Self-Enhancement * Condition																									0.14	.35	-0.15	0.42
M_6W: Optimism * Condition																									-0.05	.66	-0.25	0.16

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	-1.54	.001	-2.47	-0.62
Self-Affirmation	-0.36	.43	-1.25	0.54

Indirect Effects via Mediators

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE			M_6: O		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*		a_5b_5	*CI*		a_6b_6	*CI*	
Control	0.96	0.60	1.37	0.20	-0.06	0.47	0.05	-0.19	0.30	-0.08	-0.22	0.03	0.31	-0.12	0.74	0.02	-0.38	0.44
Self-Affirmation	0.51	0.19	0.86	0.26	-0.02	0.56	0.01	-0.22	0.23	-0.09	-0.22	0.02	0.59	0.12	1.07	-0.10	-0.49	0.31

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.46	-0.92	-0.03	0.06	-0.31	0.44	-0.04	-0.38	0.29	-0.01	-0.17	0.16	0.28	-0.35	0.91	-0.12	-0.70	0.45

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

Appendix A – Tables Chapter 4

Table A4.21

*Results from A Second Stage Moderated Mediation Model with **Downplaying (D)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																								
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				M_6: O				Y: Downplaying			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.51	<.001	6.31	6.71	4.81	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.82	3.50	4.18	<.001	4.05	4.30	3.87	<.001	3.68	4.06	5.22	<.001	3.91	6.53
Adaptive Narcissism	-2.31	<.001	-2.86	-1.76	1.40	<.001	1.03	1.77	-1.89	<.001	-2.49	-1.29	-0.77	.001	-1.23	-0.30	2.04	<.001	1.68	2.39	2.66	<.001	2.14	3.18	-0.93	.007	-1.60	-0.25
Maladaptive Narcissism	1.24	.001	0.49	2.00	1.84	<.001	1.34	2.35	3.24	<.001	2.41	4.06	1.77	<.001	1.14	2.40	0.39	0.11	-0.09	0.88	-0.95	<.001	-1.65	-0.24	0.09	.88	-1.12	1.30
U_1: survey source													-0.24	.006	-0.42	-0.07												
M_1: BIS																									-0.39	<.001	-0.52	-0.27
M_2: BAS																									0.11	.26	-0.08	0.29
M_3:Impulsivity																									-0.03	.62	-0.16	0.09
M_4: Self-Protection																									0.11	.14	-0.04	0.25
M_5: Self-Enhancement																									0.12	.25	-0.08	0.32
M_6: Optimism																									0.00	1.00	-0.15	0.15
W: Condition																									-2.37	.012	-4.22	-0.52
XW: MN * Condition																									-0.07	.93	-1.65	1.51
M_1W: BIS * Condition																									0.16	.07	-0.01	0.33
M_2W: BAS * Condition																									0.11	.40	-0.15	0.37
M_3W: Impulsivity * Condition																									0.03	.75	-0.14	0.19
M4W: Self-Protection * Condition																									0.00	1.00	-0.20	0.20
M5W: Self-Enhancement * Condition																									0.21	.14	-0.07	0.49
M_6W: Optimism * Condition																									-0.04	.73	-0.24	0.17

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	0.09	.88	-1.12	1.30
Self-Affirmation	0.02	.98	-1.12	1.16

Indirect Effects via Mediators

	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				M_6: O			
	a_1b_1	*CI*			a_2b_2	*CI*			a_3b_3	*CI*			a_4b_4	*CI*			a_5b_5	*CI*			a_6b_6	*CI*		
Control	-0.49	-0.86	-0.18		0.20	-0.16	0.57		-0.10	-0.54	0.31		0.19	-0.06	0.48		0.05	-0.04	0.19		0.00	-0.17	0.16	
Self-Affirmation	-0.29	-0.56	-0.08		0.40	0.04	0.78		-0.01	-0.39	0.37		0.19	-0.05	0.45		0.13	-0.03	0.35		0.03	-0.13	0.20	

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.20	-0.03	0.51	0.20	-0.32	0.71	0.09	-0.47	0.66	0.00	-0.37	0.34	0.08	-0.05	0.29	0.03	-0.18	0.28

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

Appendix A – Tables Chapter 4

Table A4.22

*Results from A Second Stage Moderated Mediation Model with **Downplaying (D)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				M_6: O				Y: Downplaying			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.35	<.001	2.98	3.72	5.66	<.001	5.36	5.97	1.73	<.001	1.32	2.14	1.88	<.001	1.43	2.32	5.21	<.001	4.92	5.50	6.53	<.001	6.15	6.90	5.30	<.001	3.95	6.65
X: Narcissism	0.62	<.001	0.54	0.71	0.00	.99	-0.07	0.07	0.64	<.001	0.55	0.73	0.29	<.001	0.21	0.36	-0.06	0.07	-0.13	0.01	-0.46	<.001	-0.55	-0.38	-0.01	.94	-0.18	0.17
U_1: survey source													-0.13	.13	-0.30	0.04												
M_1: BIS																									-0.36	<.001	-0.49	-0.23
M_2: BAS																									0.07	.47	-0.11	0.24
M_3:Impulsivity																									-0.03	.59	-0.16	0.09
M_4: Self-Protection																									0.12	.11	-0.03	0.26
M_5: Self-Enhancement																									0.07	.49	-0.13	0.28
M_6: Optimism																									-0.01	.85	-0.17	0.14
W: Condition																									-2.48	.011	-4.38	-0.58
XW: VN * Condition																									0.09	.47	-0.16	0.34
M_1W: BIS * Condition																									0.13	.16	-0.05	0.31
M_2W: BAS * Condition																									0.10	.42	-0.15	0.35
M_3W: Impulsivity * Condition																									0.02	.82	-0.15	0.19
M4W: Self-Protection * Condition																									-0.02	.85	-0.22	0.18
M5W: Self-Enhancement * Condition																									0.18	.20	-0.10	0.46
M_6W: Optimism * Condition																									0.00	.97	-0.21	0.21

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	-0.01	.94	-0.18	0.17
Self-Affirmation	0.08	.35	-0.09	0.26

Indirect Effects via Mediators

	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				M_6: O			
	a_1b_1	*CI*			a_2b_2	*CI*			a_3b_3	*CI*			a_4b_4	*CI*			a_5b_5	*CI*			a_6b_6	*CI*		
Control	-0.23	-0.32	-0.14		0.00	-0.01	0.01		-0.02	-0.11	0.06		0.03	-0.01	0.08		0.00	-0.02	0.01		0.01	-0.07	0.08	
Self-Affirmation	-0.14	-0.24	-0.05		0.00	-0.02	0.02		-0.01	-0.08	0.07		0.03	-0.01	0.07		-0.02	-0.04	0.00		0.01	-0.06	0.08	

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*			Index	*CI*			Index	*CI*			Index	*CI*			Index	*CI*			Index	*CI*		
Condition	0.08	-0.04	0.21		0.00	-0.01	0.01		0.01	-0.10	0.13		-0.01	-0.06	0.05		-0.01	-0.04	0.01		0.00	-0.10	0.11	

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

Table A4.23

*Results from A Second Stage Moderated Mediation Model with **Anger/Aggression (A)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																			
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: Anger/ Aggression			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.47	<.001	6.26	6.67	4.77	<.001	4.64	4.91	4.38	<.001	4.15	4.61	2.97	<.001	2.63	3.30	4.12	<.001	3.99	4.25	0.63	.28	-0.51	1.78
X: Narcissism	-1.84	<.001	-2.51	-1.17	3.37	<.001	2.93	3.80	0.18	.64	-0.57	0.93	0.63	.026	0.08	1.18	3.16	<.001	2.74	3.57	1.11	.07	-0.11	2.33
U_1: survey source													-0.16	.07	-0.34	0.01								
M_1: BIS																					0.13	.035	0.01	0.25
M_2: BAS																					-0.10	.26	-0.27	0.07
M_3: Impulsivity																					0.36	<.001	0.25	0.48
M_4: Self-Protection																					0.25	<.001	0.11	0.39
M_5: Self-Enhancement																					-0.08	.41	-0.27	0.11
W: Condition																					-0.59	.48	-2.24	1.06
XW: GN * Condition																					0.47	.58	-1.19	2.13
M_1W: BIS * Condition																					-0.03	.72	-0.19	0.13
M_2W: BAS * Condition																					0.14	.25	-0.10	0.38
M3W: Impulsivity * Condition																					0.01	.95	-0.15	0.16
M4W: Self-Protection * Condition																					-0.05	.60	-0.24	0.14
M_5W: Self- Enhancement * Condition																					-0.02	.87	-0.28	0.23

Conditional Direct Effects of X on Y	effect	*p*	*CI*		
Control	1.11	.07	-0.11	2.33	2.31
Self-Affirmation	1.58	.006	0.46	2.71	2.73

Indirect Effects via Mediators

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*		a_4b_4	*CI*	
Control	-0.24	-0.52	0.00	-0.34	-0.97	0.29	0.06	-0.22	0.36	0.16	0.02	0.35	-0.25	-1.00	0.46
Self-Affirmation	-0.18	-0.42	0.01	0.14	-0.38	0.67	0.07	-0.22	0.37	0.13	0.01	0.29	-0.32	-0.90	0.24

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.06	-0.25	0.38	0.48	-0.32	1.32	0.00	-0.07	0.09	-0.03	-0.19	0.11	-0.07	-0.99	0.87

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement

Appendix A – Tables Chapter 4

Table A4.24

*Results from A Second Stage Moderated Mediation Model with **Anger/Aggression (A)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: Anger/ Aggression			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.50	<.001	6.30	6.70	4.80	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	0.67	.25	-0.47	1.82
Adaptive Narcissism	-2.28	<.001	-2.83	-1.73	1.42	<.001	1.05	1.79	-1.87	<.001	-2.47	-1.27	-0.74	.002	-1.21	-0.28	2.06	<.001	1.70	2.41	0.03	.95	-0.85	0.91
Maladaptive Narcissism	1.23	.001	0.48	1.98	1.82	<.001	1.31	2.32	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	0.13	-0.11	0.86	1.22	.004	0.39	2.05
U_1: survey source													-0.25	.005	-0.43	-0.08								
M_1: BIS																					0.12	.042	0.00	0.24
M_2: BAS																					-0.11	.21	-0.28	0.06
M_3: Impulsivity																					0.35	<.001	0.24	0.46
M_4: Self-Protection																					0.24	<.001	0.10	0.38
M_5: Self-Enhancement																					-0.05	.63	-0.24	0.14
W: Condition																					-0.60	.47	-2.23	1.03
XW: AN * Condition																					0.38	.52	-0.79	1.55
M_1W: BIS * Condition																					-0.03	.70	-0.20	0.13
M_2W: BAS * Condition																					0.15	.21	-0.09	0.39
M3W: Impulsivity * Condition																					0.01	.89	-0.14	0.16
M4W: Self-Protection * Condition																					-0.05	.61	-0.23	0.14
M_5W: Self- Enhancement * Condition																					-0.03	.80	-0.29	0.22

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	0.03	.95	-0.85	0.91
Self-Affirmation	0.41	.35	-0.45	1.26

Indirect Effects via Mediators

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_3b_3	*CI*		a_4b_4	*CI*	
Control	-0.28	-0.59	0.00	-0.16	-0.44	0.11	-0.65	-1.02	-0.35	-0.18	-0.37	-0.04	-0.10	-0.56	0.36
Self-Affirmation	-0.21	-0.47	0.04	0.06	-0.16	0.29	-0.67	-1.01	-0.38	-0.14	-0.30	-0.03	-0.16	-0.54	0.20

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.07	-0.31	0.45	0.21	-0.12	0.57	-0.02	-0.30	0.28	0.04	-0.12	0.21	-0.07	-0.67	0.51

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement

Table A4.25

*Results from A Second Stage Moderated Mediation Model with **Anger/Aggression (A)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: Anger/ Aggression			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.50	<.001	6.30	6.70	4.80	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	0.68	.25	-0.47	1.83
Adaptive Narcissism	-2.28	<.001	-2.83	-1.73	1.42	<.001	1.05	1.79	-1.87	<.001	-2.47	-1.27	-0.74	.002	-1.21	-0.28	2.06	<.001	1.70	2.41	0.22	.50	-0.42	0.86
Maladaptive Narcissism	1.23	.001	0.48	1.98	1.82	<.001	1.31	2.32	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	.13	-0.11	0.86	1.18	.043	0.04	2.33
U_1: survey source													-0.25	.005	-0.43	-0.08								
M_1: BIS																					0.13	.030	0.01	0.25
M_2: BAS																					-0.12	.18	-0.29	0.05
M_3: Impulsivity																					0.35	<.001	0.24	0.46
M_4: Self-Protection																					0.24	<.001	0.11	0.38
M_5: Self-Enhancement																					-0.06	.54	-0.24	0.13
W: Condition																					-0.61	.47	-2.27	1.04
XW: MN * Condition																					0.08	.92	-1.42	1.59
M_1W: BIS * Condition																					-0.04	.59	-0.20	0.12
M_2W: BAS * Condition																					0.17	.17	-0.07	0.41
M3W: Impulsivity * Condition																					0.01	.91	-0.14	0.16
M4W: Self-Protection * Condition																					-0.05	.58	-0.24	0.13
M_5W: Self- Enhancement * Condition																					-0.01	.94	-0.26	0.24

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	1.18	.04	0.04	2.33
Self-Affirmation	1.26	.02	0.17	2.35

Indirect Effects via Mediators

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_3b_3	*CI*		a_4b_4	*CI*	
Control	0.16	0.01	0.36	-0.22	-0.57	0.12	1.13	0.69	1.66	0.43	0.14	0.78	-0.02	-0.14	0.07
Self-Affirmation	0.11	-0.02	0.28	0.09	-0.18	0.38	1.16	0.74	1.67	0.33	0.09	0.63	-0.03	-0.13	0.05

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.05	-0.27	0.16	0.31	-0.12	0.77	0.03	-0.49	0.55	-0.09	-0.47	0.28	0.00	-0.14	0.13

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement

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Table A4.26

*Results from A Second Stage Moderated Mediation Model with **Anger/Aggression (A)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: Anger/ Aggression			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.35	<.001	2.98	3.72	5.65	<.001	5.35	5.96	1.73	<.001	1.32	2.14	1.88	<.001	1.44	2.32	5.20	<.001	4.91	5.49	0.17	.77	-0.98	1.32
X: Narcissism	0.62	<.001	0.54	0.71	0.00	.94	-0.07	0.07	0.64	<.001	0.55	0.73	0.29	<.001	0.21	0.36	-0.06	.09	-0.12	0.01	0.21	.009	0.05	0.38
U_1: survey source													-0.14	.11	-0.31	0.03								
M_1: BIS																			b_1		0.05	.41	-0.07	0.17
M_2: BAS																			b_2		-0.01	.87	-0.18	0.15
M_3: Impulsivity																			b_3		0.33	<.001	0.21	0.44
M_4: Self-Protection																			b_4		0.23	.001	0.09	0.36
M_5: Self-Enhancement																			b_5		-0.07	.47	-0.25	0.12
W: Condition																			c_2'		-0.85	.32	-2.50	0.81
XW: VN * Condition																			c_3'		0.03	.83	-0.20	0.26
M_1W: BIS * Condition																			b_6		-0.05	.57	-0.22	0.12
M_2W: BAS * Condition																			b_7		0.14	.22	-0.09	0.37
M3W: Impulsivity * Condition																			b_8		0.00	1.00	-0.16	0.16
M4W: Self-Protection * Condition																			b_9		-0.06	.52	-0.25	0.13
M_5W: Self- Enhancement * Condition																			b_{10}		0.06	.63	-0.19	0.31

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	0.21	.009	0.05	0.38
Self-Affirmation	0.24	.004	0.08	0.40

Indirect Effects via Mediators

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*		a_4b_4	*CI*	
Control	0.03	-0.05	0.11	0.00	-0.01	0.01	0.21	0.13	0.30	0.06	0.02	0.11	0.00	-0.01	0.02
Self-Affirmation	0.00	-0.07	0.08	0.00	-0.01	0.01	0.21	0.14	0.29	0.05	0.01	0.09	0.00	-0.01	0.01

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.03	-0.14	0.08	0.00	-0.02	0.02	0.00	-0.11	0.10	-0.02	-0.08	0.04	0.00	-0.03	0.01

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement

Table A4.27

*Results from A Second Stage Moderated Mediation Model with **Active Escapism (AE)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: Active Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.47	<.001	6.26	6.67	4.77	<.001	4.64	4.91	4.38	<.001	4.15	4.61	2.97	<.001	2.63	3.30	4.12	<.001	3.99	4.25	1.43	.037	0.09	2.77
X: Narcissism	-1.84	<.001	-2.51	-1.17	3.37	<.001	2.93	3.80	0.18	.64	-0.57	0.93	0.63	.026	0.08	1.18	3.16	<.001	2.74	3.57	-0.16	.83	-1.58	1.27
U_1: survey source													-0.16	.07	-0.34	0.01								
M_1: BIS																			b_1		-0.09	.20	-0.23	0.05
M_2: BAS																			b_2		0.33	.001	0.13	0.53
M_3: Impulsivity																			b_3		-0.05	.44	-0.18	0.08
M_4: Self-Protection																			b_4		0.23	.005	0.07	0.39
M_5: Self-Enhancement																			b_5		0.13	.25	-0.09	0.35
W: Condition																			c_2'		-0.75	.45	-2.68	1.18
XW: GN * Condition																			c_3'		0.61	.54	-1.33	2.55
M_1W: BIS * Condition																			b_6		-0.03	.76	-0.22	0.16
M_2W: BAS * Condition																			b_7		0.12	.39	-0.16	0.41
M3W: Impulsivity * Condition																			b_8		0.06	.49	-0.11	0.24
M4W: Self-Protection * Condition																			b_9		-0.05	.66	-0.27	0.17
M_5W: Self- Enhancement * Condition																			b_{10}		0.01	.94	-0.29	0.31

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	-0.16	.83	-1.58	1.27
Self-Affirmation	0.45	.50	-0.87	1.76

Indirect Effects via Mediators

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Control	0.17	-0.11	0.49	1.11	0.45	1.77	-0.01	-0.11	0.06	0.14	0.01	0.34	0.41	-0.33	1.13
Self-Affirmation	0.22	-0.03	0.53	1.53	0.88	2.18	0.00	-0.05	0.07	0.11	0.00	0.29	0.45	-0.18	1.09

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.05	-0.34	0.46	0.42	-0.50	1.33	0.01	-0.08	0.14	-0.03	-0.20	0.13	0.04	-0.92	1.02

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

Appendix A – Tables Chapter 4

Table A4.28

*Results from A Second Stage Moderated Mediation Model with **Active Escapism (AE)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: Active Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.50	<.001	6.30	6.70	4.80	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	1.33	.05	0.00	2.66
Adaptive Narcissism	-2.28	<.001	-2.83	-1.73	1.42	<.001	1.05	1.79	-1.87	<.001	-2.47	-1.27	-0.74	.002	-1.21	-0.28	2.06	<.001	1.70	2.41	-0.25	.63	-1.28	0.77
Maladaptive Narcissism	1.23	.001	0.48	1.98	1.82	<.001	1.31	2.32	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	0.13	-0.11	0.86	*-0.69*	.16	0.16	0.16
U_1: survey source													-0.25	.005	-0.43	-0.08								
M_1: BIS																				b_1	-0.11	.12	-0.25	0.03
M_2: BAS																				b_2	0.37	<.001	0.17	0.57
M_3: Impulsivity																				b_3	-0.04	.58	-0.17	0.09
M_4: Self-Protection																				b_4	0.23	.004	0.07	0.40
M_5: Self-Enhancement																				b_5	0.15	.20	-0.08	0.37
W: Condition																				c_2'	-0.73	.45	-2.63	1.17
XW: AN * Condition																				c_3'	1.58	.023	0.22	2.94
M_1W: BIS * Condition																				b_6	0.01	.90	-0.18	0.20
M_2W: BAS * Condition																				b_7	0.06	.67	-0.22	0.34
M3W: Impulsivity * Condition																				b_8	0.06	.50	-0.11	0.23
M4W: Self-Protection * Condition																				b_9	-0.03	.77	-0.25	0.18
M_5W: Self- Enhancement * Condition																				b_{10}	-0.06	.72	-0.35	0.24

Conditional Direct Effects of X on Y

	effect	*p*	*CI*	
Control	-0.25	.63	-1.28	0.77
Self-Affirmation	1.33	.009	0.33	2.32

Indirect Effects via Mediators

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*		a_5b_5	*CI*	
Control	0.25	-0.10	0.63	0.53	0.24	0.85	0.07	-0.22	0.35	-0.17	-0.37	-0.04	0.30	-0.17	0.76
Self-Affirmation	0.22	-0.10	0.56	0.61	0.32	0.94	-0.04	-0.29	0.20	-0.15	-0.30	-0.03	0.18	-0.23	0.61

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.03	-0.52	0.45	0.08	-0.30	0.49	-0.11	-0.48	0.26	0.02	-0.14	0.22	-0.11	-0.74	0.50

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

Table A4.29

*Results from A Second Stage Moderated Mediation Model with **Active Escapism (AE)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: Active Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.50	<.001	6.30	6.70	4.80	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	1.37	.050	0.03	2.72
Adaptive Narcissism	-2.28	<.001	-2.83	-1.73	1.42	<.001	1.05	1.79	-1.87	<.001	-2.47	-1.27	-0.74	.002	-1.21	-0.28	2.06	<.001	1.70	2.41	0.56	.14	-0.19	1.31
Maladaptive Narcissism	1.23	.001	0.48	1.98	1.82	<.001	1.31	2.32	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	0.13	-0.11	0.86	-0.64	.35	-1.98	0.70
U_1: survey source													-0.25	.005	-0.43	-0.08								
M_1: BIS																					-0.08	.26	-0.22	0.06
M_2: BAS																					0.32	.002	0.12	0.53
M_3: Impulsivity																					-0.04	.55	-0.17	0.09
M_4: Self-Protection																					0.24	.003	0.08	0.40
M_5: Self-Enhancement																					0.10	.39	-0.12	0.31
W: Condition																					-0.86	.38	-2.79	1.07
XW: MN * Condition																					-0.04	.97	-1.80	1.72
M_1W: BIS * Condition																					-0.04	.69	-0.23	0.15
M_2W: BAS * Condition																					0.15	.29	-0.13	0.43
M3W: Impulsivity * Condition																					0.06	.49	-0.12	0.24
M4W: Self-Protection * Condition																					-0.05	.68	-0.26	0.17
M_5W: Self- Enhancement * Condition																					0.04	.76	-0.24	0.33

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	-0.64	.35	-1.98	0.70
Self-Affirmation	-0.68	.30	-1.95	0.59

Indirect Effects via Mediators

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*		a_5b_5	*CI*	
Control	-0.10	-0.34	0.09	0.59	0.21	1.02	-0.13	-0.61	0.37	0.42	0.12	0.79	0.04	-0.06	0.17
Self-Affirmation	-0.14	-0.37	0.03	0.86	0.48	1.29	0.07	-0.33	0.50	0.34	0.08	0.65	0.05	-0.03	0.19

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.05	-0.33	0.23	0.27	-0.22	0.77	0.20	-0.44	0.84	-0.08	-0.49	0.31	0.02	-0.11	0.17

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

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Table A4.30

*Results from A Second Stage Moderated Mediation Model with **Active Escapism (AE)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: Active Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.35	<.001	2.98	3.72	5.65	<.001	5.35	5.96	1.73	<.001	1.32	2.14	1.88	<.001	1.44	2.32	5.20	<.001	4.91	5.49	1.66	.016	0.31	3.01
X: Narcissism	0.62	<.001	0.54	0.71	0.00	.94	-0.07	0.07	0.64	<.001	0.55	0.73	0.29	<.001	0.21	0.36	-0.06	.09	-0.12	0.01	-0.15	.13	-0.34	0.04
U_1: survey source													-0.14	.11	-0.31	0.03								
M_1: BIS																			b_1		-0.05	.46	-0.20	0.09
M_2: BAS																			b_2		0.30	.002	0.11	0.49
M_3: Impulsivity																			b_3		-0.02	.77	-0.15	0.11
M_4: Self-Protection																			b_4		0.25	.003	0.09	0.41
M_5: Self-Enhancement																			b_5		0.15	.18	-0.07	0.36
W: Condition																			c_2'		-1.14	.25	-3.08	0.80
XW: VN * Condition																			c_3'		0.19	.16	-0.08	0.46
M_1W: BIS * Condition																			b_6		-0.09	.37	-0.29	0.11
M_2W: BAS * Condition																			b_7		0.18	.20	-0.09	0.44
M3W: Impulsivity * Condition																			b_8		0.03	.77	-0.16	0.21
M4W: Self-Protection * Condition																			b_9		-0.08	.50	-0.30	0.15
M_5W: Self- Enhancement * Condition																			b_{10}		0.02	.89	-0.27	0.31

Conditional Direct Effects of X on Y

	effect	*p*	*CI*	
Control	-0.15	.13	-0.34	0.04
Self-Affirmation	0.05	.64	-0.15	0.24

Indirect Effects via Mediators

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*		a_5b_5	*CI*	
Control	-0.03	-0.13	0.06	0.00	-0.02	0.03	-0.01	-0.11	0.09	0.07	0.02	0.12	-0.01	-0.03	0.01
Self-Affirmation	-0.09	-0.19	0.00	0.00	-0.04	0.04	0.00	-0.08	0.09	0.05	0.01	0.09	-0.01	-0.03	0.00

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.06	-0.19	0.08	0.00	-0.02	0.02	0.02	-0.11	0.15	-0.02	-0.09	0.04	0.00	-0.02	0.02

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism

Table A4.31

*Results from A Second Stage Moderated Mediation Model with **Considering Perspective (CP)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable															
	M_1: Impulsivity				M_2: Self-Protection				M_3: Self-Enhancement				Y: Considering Perspective			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.38	<.001	4.15	4.61	2.97	<.001	2.63	3.30	4.12	<.001	3.99	4.25	4.36	<.001	3.52	5.19
X: Narcissism	0.18	.64	-0.57	0.93	0.63	.026	0.08	1.18	3.16	<.001	2.74	3.57	-0.90	.07	-1.90	0.09
U_1: survey source					-0.16	.07	-0.34	0.01								
M_1: Impulsivity																
M_2: Self-Protection																
M_3: Self-Enhancement																
W: Condition																
XW: GN * Condition																
M_1W: Impulsivity * Condition																
M2W: Self-Protection * Condition																
M3W: Self-Enhancement * Condition																

													b_1	-0.04	.35	-0.13	0.04
													b_2	-0.19	.002	-0.32	-0.07
													b_3	0.33	<.001	0.17	0.49
													c_2'	-0.93	.11	-2.07	0.21
													c_3'	0.26	.71	-1.11	1.63
													b_4	-0.03	.68	-0.15	0.10
													b_5	0.06	.49	-0.11	0.22
													b_6	0.19	.08	-0.02	0.41

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	-0.90	.07	-1.90	0.09
Self-Affirmation	-0.65	.18	-1.59	0.30

Indirect effects via Mediators

	M_1: Impulsivity			M_2: Self-Protection			M_3: Self-Enhancement		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*	
Control	-0.01	-0.07	0.04	-0.12	-0.28	-0.01	1.05	0.41	1.73
Self-Affirmation	-0.01	-0.10	0.04	-0.08	-0.21	0.00	1.66	1.14	2.20

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.00	-0.09	0.05	0.04	-0.09	0.18	0.61	-0.17	1.40

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples)

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Table A4.32

*Results from A Second Stage Moderated Mediation Model with **Considering Perspective (CP)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable															
	M_1: Impulsivity				M_2: Self-Protection				M_3: Self-Enhancement				Y: Considering Perspective			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	4.35	<.001	3.51	5.18
Adaptive Narcissism	-1.87	<.001	-2.47	-1.27	-0.74	.002	-1.21	-0.28	2.06	<.001	1.70	2.41	-0.16	.67	-0.91	0.59
Maladaptive Narcissism	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	0.13	-0.11	0.86	-0.96	.009	0.01	0.01
U_1: survey source					-0.25	.005	-0.43	-0.08								
M_1: Impulsivity													b_1	-0.03	.54	-0.11	0.06
M_2: Self-Protection													b_2	-0.19	.003	-0.31	-0.06
M_3: Self-Enhancement													b_3	0.32	<.001	0.16	0.48
W: Condition													c_2'	-0.91	.11	-2.03	0.22
XW: AN * Condition													c_3'	0.62	.21	-0.36	1.60
M_1W: Impulsivity * Condition													b_4	-0.02	.69	-0.14	0.10
M2W: Self-Protection * Condition													b_5	0.07	.42	-0.10	0.23
M3W: Self-Enhancement * Condition													b_6	0.15	.16	-0.06	0.36

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	-0.16	.67	-0.91	0.59
Self-Affirmation	0.46	.22	-0.27	1.19

Indirect effects via Mediators

	M_1: Impulsivity			M_2: Self-Protection			M_3: Self-Enhancement		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*	
Control	0.05	-0.13	0.24	0.14	0.02	0.30	0.66	0.25	1.11
Self-Affirmation	0.10	-0.08	0.29	0.09	0.00	0.21	0.97	0.64	1.34

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.05	-0.22	0.31	-0.05	-0.21	0.09	0.31	-0.17	0.82

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples)

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Table A4.33

*Results from A Second Stage Moderated Mediation Model with **Considering Perspective (CP)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable															
	M_1: Impulsivity				M_2: Self-Protection				M_3: Self-Enhancement				Y: CP			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	4.36	<.001	3.52	5.19
Adaptive Narcissism	-1.87	<.001	-2.47	-1.27	-0.74	.002	-1.21	-0.28	2.06	<.001	1.70	2.41	0.16	.58	-0.40	0.71
Maladaptive Narcissism	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	.13	-0.11	0.86	-1.11	.025	-2.08	-0.14
U_1: survey source					-0.25	.005	-0.43	-0.08								
M_1: Impulsivity													-0.02	.62	-0.11	0.07
M_2: Self-Protection													-0.18	.004	-0.31	-0.06
M_3: Self-Enhancement													0.30	<.001	0.14	0.45
W: Condition													-0.93	.11	-2.07	0.20
XW: MN * Condition													0.31	.64	-0.96	1.57
M_1W: Impulsivity * Condition													-0.03	60	-0.16	0.09
M2W: Self-Protection * Condition													0.06	.49	-0.11	0.22
M3W: Self-Enhancement * Condition													0.20	.046	0.00	0.40

Conditional Direct Effects of X on Y

	effect	*p*	*CI*	
Control	-1.11	.025	-2.08	-0.14
Self-Affirmation	-0.81	.10	-1.75	0.14

Indirect effects via Mediators

	M_1: Impulsivity			M_2: Self-Protection			M_3: Self-Enhancement		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*	
Control	-0.07	-0.41	0.26	-0.32	-0.61	-0.07	0.11	-0.03	0.29
Self-Affirmation	-0.18	-0.51	0.12	-0.22	-0.46	-0.01	0.19	-0.05	0.43

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.11	-0.57	0.35	0.10	-0.22	0.43	0.07	-0.03	0.25

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples)

Appendix A – Tables Chapter 4

Table A4.34

*Results from A Second Stage Moderated Mediation Model with **Considering Perspective (CP)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable															
	M_1: Impulsivity				M_2: Self-Protection				M_3: Self-Enhancement				Y: CP			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	1.73	<.001	1.32	2.14	1.88	<.001	1.44	2.32	5.20	<.001	4.91	5.49	4.51	<.001	3.62	5.40
X: Narcissism	0.64	<.001	0.55	0.73	0.29	<.001	0.21	0.36	-0.06	.09	-0.12	0.01	-0.01	.91	-0.14	0.13
U_1: survey source					-0.14	.11	-0.31	0.03								
M_1: Impulsivity											b_1		-0.05	.33	-0.14	0.05
M_2: Self-Protection											b_2		-0.20	.002	-0.32	-0.07
M_3: Self-Enhancement											b_3		0.27	<.001	0.12	0.41
W: Condition											c_2'		-1.03	.11	-2.28	0.22
XW: VN * Condition											c_3'		0.02	.81	-0.17	0.22
M_1W: Impulsivity * Condition											b_4		-0.03	.67	-0.16	0.10
M2W: Self-Protection * Condition											b_5		0.06	.49	-0.11	0.23
M3W: Self-Enhancement * Condition											b_6		0.21	.034	0.02	0.40

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	-0.01	.91	-0.14	0.13
Self-Affirmation	0.02	.82	-0.12	0.15

Indirect effects via Mediators

	M_1: Impulsivity			M_2: Self-Protection			M_3: Self-Enhancement		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*	
Control	-0.03	-0.10	0.03	-0.06	-0.10	-0.01	-0.02	-0.04	0.00
Self-Affirmation	-0.05	-0.11	0.01	-0.04	-0.08	0.00	-0.03	-0.07	0.01

Index of moderated mediation(difference between conditional indirect effects)

	Index	*CI*		Index	*CI*		Index	*CI*	
Condition	-0.02	-0.11	0.07	0.02	-0.04	0.07	-0.01	-0.04	0.00

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples)

Table A4.35

*Results from a Second Stage Moderated Mediation Model with **Looking for (spiritual) Help (LfH)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: PASS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: LfH			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.99	<.001	4.60	5.38	4.77	<.001	4.64	4.91	4.38	<.001	4.15	4.61	2.97	<.001	2.63	3.30	4.12	<.001	3.99	4.25	1.65	.018	0.29	3.00
X: Narcissism (a)	1.36	<.001	0.72	2.01	3.37	<.001	2.93	3.80	0.18	.64	-0.57	0.93	0.63	.026	0.08	1.18	3.16	<.001	2.74	3.57	0.99	.16	-0.39	2.37
U_1: survey source	0.55	<.001	0.34	0.75									-0.16	.07	-0.34	0.01					-0.97	<.001	-1.22	-0.71
M_1: PASS																			b_1		0.03	.63	-0.10	0.17
M_2: BAS																			b_2		-0.01	.95	-0.21	0.20
M_3: Impulsivity																			b_3		-0.06	.35	-0.17	0.06
M_4: Self-Protection																			b_4		0.17	.035	0.01	0.33
M_5: Self-Enhancement																			b_5		0.39	.001	0.16	0.61
W: Condition																			c_2'		-0.39	.69	-2.27	1.49
XW: GN * Condition																			c_3'		-1.67	.09	-3.57	0.24
M_1W: BIS * Condition																			b_6		0.00	.96	-0.19	0.20
M_2W: BAS * Condition																			b_7		0.04	.77	-0.24	0.32
M3W: Impulsivity * Condition																			b_8		0.06	.44	-0.10	0.23
M4W: Self-Protection * Condition																			b_9		-0.05	.68	-0.27	0.17
M_5W: Self- Enhancement * Condition																			b_{10}		0.14	.38	-0.17	0.45

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	0.99	.16	-0.39	2.37
Self-Affirmation	-0.68	.31	-1.99	0.63

Indirect Effects via Mediators

	M_1: PASS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*		a_5b_5	*CI*	
Control	0.04	-0.13	0.24	-0.02	-0.75	0.69	-0.01	-0.10	0.06	0.11	-0.01	0.29	1.22	0.48	2.00
Self-Affirmation	0.05	-0.16	0.27	0.12	-0.56	0.78	0.00	-0.05	0.06	0.08	-0.02	0.24	1.66	0.95	2.41

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.01	-0.28	0.28	0.14	-0.89	1.14	0.01	-0.07	0.14	-0.03	-0.21	0.14	0.44	-0.59	1.45

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support; BAS = Behavioural Approach System; I = Impulsivity SP = Self-Protection; SE = Self-Enhancement

Appendix A – Tables Chapter 4

Table A4.36

*Results from A Second Stage Moderated Mediation Model with **Looking for (spiritual) Help (LfH)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: PASS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: LfH			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.93	<.001	4.53	5.32	4.80	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	1.21	.08	-0.13	2.55
Adaptive Narcissism	1.38	<.001	0.83	1.92	1.42	<.001	1.05	1.79	-1.87	<.001	-2.47	-1.27	-0.74	.002	-1.21	-0.28	2.06	<.001	1.70	2.41	0.96	.06	-0.04	1.97
Maladaptive Narcissism	-0.69	.07	-1.43	0.04	1.82	<.001	1.31	2.32	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	.13	-0.11	0.86	-1.08	.028	-2.05	-0.11
U_1: survey source	0.61	<.001	0.40	0.82									-0.25	.005	-0.43	-0.08					-0.89	<.001	-1.15	-0.63
M_1: PASS																				b_1	0.03	.65	-0.10	0.17
M_2: BAS																				b_2	0.05	.65	-0.15	0.25
M_3: Impulsivity																				b_3	-0.03	.64	-0.15	0.09
M_4: Self-Protection																				b_4	0.20	.017	0.04	0.36
M_5: Self-Enhancement																				b_5	0.38	.001	0.16	0.61
W: Condition																				c_2'	0.04	.97	-1.81	1.88
XW: AN * Condition																				c_3'	-0.18	.79	-1.51	1.15
M_1W: BIS * Condition																				b_6	0.01	.95	-0.18	0.20
M_2W: BAS * Condition																				b_7	-0.04	.78	-0.32	0.24
M3W: Impulsivity * Condition																				b_8	0.06	.50	-0.11	0.22
M4W: Self-Protection * Condition																				b_9	-0.05	.68	-0.27	0.17
M_5W: Self- Enhancement * Condition																				b_{10}	0.07	.65	-0.24	0.38

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	0.96	.06	-0.04	1.97
Self-Affirmation	0.78	.12	-0.21	1.77

Indirect Effects via Mediators

	M_1: PASS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*		a_5b_5	*CI*	
Control	0.04	-0.14	0.23	0.06	-0.25	0.38	0.05	-0.22	0.29	-0.15	-0.34	-0.01	0.79	0.32	1.31
Self-Affirmation	0.05	-0.16	0.26	0.01	-0.28	0.28	-0.05	-0.28	0.17	-0.11	-0.27	0.01	0.94	0.47	1.46

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.01	-0.27	0.28	-0.06	-0.49	0.36	-0.10	-0.42	0.24	0.03	-0.14	0.25	0.15	-0.52	0.82

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support; BAS = Behavioural Approach System; I = Impulsivity SP = Self-Protection; SE = Self-Enhancement

Appendix A – Tables Chapter 4

Table A4.37

*Results from A Second Stage Moderated Mediation Model with **Looking for (spiritual) Help (LfH)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																			
	M_1: PASS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: LfH			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.93	<.001	4.53	5.32	4.80	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	1.53	.027	0.18	2.88
Adaptive Narcissism	1.38	<.001	0.83	1.92	1.42	<.001	1.05	1.79	-1.87	<.001	-2.47	-1.27	-0.74	.002	-1.21	-0.28	2.06	<.001	1.70	2.41	0.85	.024	0.11	1.59
Maladaptive Narcissism	-0.69	.07	-1.43	0.04	1.82	<.001	1.31	2.32	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	.13	-0.11	0.86	0.12	.86	-1.21	1.45
U_1: survey source	0.61	<.001	0.40	0.82									-0.25	.005	-0.43	-0.08					-0.92	<.001	-1.18	-0.66
M_1: PASS																					0.03	.62	-0.10	0.17
M_2: BAS																					-0.01	.91	-0.21	0.19
M_3: Impulsivity																					-0.05	.43	-0.16	0.07
M_4: Self-Protection																					0.18	.026	0.02	0.34
M_5: Self-Enhancement																					0.37	.001	0.15	0.60
W: Condition																					-0.44	.64	-2.31	1.42
XW: MN * Condition																					-2.27	.011	-4.01	-0.53
M_1W: BIS * Condition																					-0.01	.96	-0.20	0.19
M_2W: BAS * Condition																					0.06	.65	-0.22	0.34
M3W: Impulsivity * Condition																					0.09	.29	-0.07	0.25
M4W: Self-Protection * Condition																					-0.02	.84	-0.24	0.20
M_5W: Self- Enhancement * Condition																					0.11	.48	-0.19	0.40

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	0.12	.86	-1.21	1.45
Self-Affirmation	-2.15	.001	-3.42	-0.89

Indirect Effects via Mediators

	M_1: PASS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*		a_5b_5	*CI*	
Control	-0.02	-0.15	0.08	-0.02	-0.43	0.39	-0.15	-0.58	0.30	0.32	0.01	0.69	0.14	-0.03	0.38
Self-Affirmation	-0.02	-0.15	0.11	0.09	-0.26	0.46	0.13	-0.24	0.53	0.28	-0.01	0.60	0.18	-0.05	0.44

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.00	-0.16	0.17	0.12	-0.44	0.66	0.29	-0.28	0.86	-0.04	-0.49	0.38	0.04	-0.10	0.21

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support; BAS = Behavioural Approach System; I = Impulsivity SP = Self-Protection; SE = Self-Enhancement

Appendix A – Tables Chapter 4

Table A4.38

*Results from A Second Stage Moderated Mediation Model with **Looking for (spiritual) Help (LfH)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control) as Moderator.*

	Outcome variable																							
	M_1: PASS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: LfH			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	7.09	<.001	6.58	7.61	5.65	<.001	5.35	5.96	1.73	<.001	1.32	2.14	1.88	<.001	1.44	2.32	5.20	<.001	4.91	5.49	1.44	.05	0.00	2.88
X: Narcissism	-0.37	<.001	-0.46	-0.29	0.00	.94	-0.07	0.07	0.64	<.001	0.55	0.73	0.29	<.001	0.21	0.36	-0.06	.09	-0.12	0.01	-0.02	.79	-0.21	0.16
U_1: survey source	0.45	<.001	0.25	0.64									-0.14	.11	-0.31	0.03					-0.94	<.001	-1.19	-0.68
M_1: PASS																								
M_2: BAS																								
M_3: Impulsivity																								
M_4: Self-Protection																								
M_5: Self-Enhancement																								
W: Condition																								
XW: VN * Condition																								
M_1W: BIS * Condition																								
M_2W: BAS * Condition																								
M3W: Impulsivity * Condition																								
M4W: Self-Protection * Condition																								
M_5W: Self- Enhancement * Condition																								

	b_1				b_2				b_3				b_4				b_5				b_6			
	0.02	.73	-0.11	0.16	0.04	.67	-0.15	0.23	-0.05	.46	-0.18	0.08	0.18	.031	0.02	0.34	0.44	<.001	0.22	0.66				
	c_2'				c_3'																			
	0.38	.72	-1.68	2.44	-0.12	.37	-0.38	0.14																
	b_6				b_7				b_8				b_9				b_{10}							
	-0.01	.93	-0.20	0.19	-0.02	.90	-0.28	0.25	0.08	.38	-0.10	0.25	-0.01	.93	-0.23	0.21	0.05	.76	-0.25	0.34				

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control	-0.02	.79	-0.21	0.16
Self-Affirmation	-0.14	.13	-0.33	0.04

Indirect Effects via Mediators

	M_1: PASS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	a_1b_1	*CI*		a_2b_2	*CI*		a_3b_3	*CI*		a_4b_4	*CI*		a_5b_5	*CI*	
Control	-0.01	-0.06	0.04	0.00	-0.01	0.01	-0.03	-0.13	0.06	0.05	-0.00	0.11	-0.03	-0.07	0.01
Self-Affirmation	-0.01	-0.06	0.05	0.00	-0.01	0.01	0.02	-0.06	0.10	0.05	0.00	0.10	-0.03	-0.07	0.01

Index of moderated mediation (difference between conditional indirect effects):

	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Condition	0.00	-0.07	0.08	0.00	-0.01	0.01	0.05	-0.07	0.17	0.00	-0.07	0.07	0.00	-0.03	0.02

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support; BAS = Behavioural Approach System; I = Impulsivity SP = Self-Protection; SE = Self-Enhancement

Table A4.39

*Results from A Second Stage Moderated Moderated Mediation Model with **Social Support Seeking (SS)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																			
	M_1: Weakness				M_2: Exploit				M_3: Health				M_4: PASS				Y: Social Support			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.46	<.001	3.04	3.87	1.64	<.001	1.32	1.96	6.44	<.001	6.13	6.75	4.98	<.001	4.59	5.38	-0.33	.60	-1.58	0.92
X: Narcissism	-0.95	.006	-1.62	-0.27	1.51	<.001	0.99	2.03	0.54	.03	0.04	1.04	1.39	<.001	0.76	2.03	-0.82	.06	-1.68	0.04
U_1: survey source	-0.32	.004	-0.54	-0.11	0.23	.008	0.06	0.39	0.21	.01	0.05	0.37	0.55	<.001	0.34	0.75	0.43	<.001	0.25	0.62
M_1: Weakness																	b_1	0.04	.41	-0.06	0.15
M_2: Exploit																	b_2	0.28	<.001	0.16	0.39
M_3: Health																	b_3	0.25	<.001	0.10	0.40
M_4: PASS																	b_4	0.40	<.001	0.29	0.51
W: Condition																	c_2'	0.45	.64	-1.42	2.33
XW: GN * Condition																	c_3'	1.05	.08	-0.12	2.22
Z1																	b_9	-0.21	.78	-1.70	1.28
Z2																	b_{10}	0.22	.80	-1.54	1.99
Int_6	:	GN	x	Z1													b_{11}	0.39	.47	-0.65	1.42
Int_7	:	GN	x	Z2													b_{12}	-1.16	.07	-2.39	0.07
Int_18	:	GN	x	Condi	x	Z1											b_{23}	0.37	.62	-1.07	1.80
Int_19	:	GN	x	Condi	x	Z2											b_{24}	1.04	.22	-0.61	2.69

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-1.01	.16	-2.44	0.41
Control-Communal	-1.79	.021	-3.29	-0.28
Control-External	0.34	.66	-1.19	1.87
Self-Affirmation-Agentic	0.92	.21	-0.51	2.36
Self-Affirmation-Communal	-0.58	.41	-1.97	0.81
Self-Affirmation-External	0.35	.60	-0.96	1.67

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Indices of moderated moderated mediation

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.11	-0.09	0.36	0.06	-0.26	0.40	0.01	-0.19	0.21	-0.04	-0.40	0.28
Z2	0.05	-0.18	0.34	-0.35	-0.72	-0.03	-0.03	-0.25	0.15	-0.03	-0.37	0.29

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.22	-0.03	0.56	-0.27	-0.67	0.10	0.01	-0.22	0.23	-0.12	-0.51	0.22
Communal	0.01	-0.34	0.36	-0.40	-0.99	0.13	-0.02	-0.34	0.31	-0.04	-0.58	0.52
External	0.04	-0.28	0.32	0.19	-0.17	0.57	0.04	-0.17	0.28	-0.03	-0.41	0.33
by Z1 (Agentic vs Communal Stressor), among:												
Control	-0.03	-0.16	0.10	0.03	-0.19	0.25	0.00	-0.15	0.08	0.11	-0.09	0.33
Self-Affirmation	0.08	-0.08	0.29	0.09	-0.15	0.35	1.00	-0.19	0.14	0.06	-0.20	0.32
by Z2 (Agentic and Communal vs External Stressor), among:												
Control	0.08	-0.08	0.27	0.20	-0.03	0.44	-0.03	-0.18	0.11	-0.06	-0.31	0.16
Self-Affirmation	0.13	-0.03	0.39	-0.15	-0.40	0.08	-0.06	-0.23	0.07	-0.09	-0.35	0.13

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.03	-0.21	0.17	0.55	0.23	0.91	0.10	-0.03	0.31	0.63	0.27	1.09
Control-Communal	0.03	-0.15	0.22	0.49	0.14	0.91	0.15	-0.02	0.42	0.42	0.11	0.82
Control-External	-0.12	-0.36	0.08	0.22	-0.02	0.54	0.16	-0.01	0.43	0.62	0.26	1.08
Self-Affirmation-Agentic	0.19	0.01	0.49	0.27	0.05	0.58	0.11	-0.04	0.34	0.51	0.21	0.89
Self-Affirmation-Communal	0.04	-0.25	0.35	0.09	-0.33	0.55	0.13	-0.10	0.51	0.39	-0.05	0.96
Self-Affirmation-External	-0.07	-0.36	0.11	0.41	0.16	0.72	0.21	0.00	0.47	0.59	0.26	1.00

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.40

*Results from A Second Stage Moderated Moderated Mediation Model with **Social Support Seeking (SS)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																			
	M_1: Weakness				M_2: Exploit				M_3: Health				M_4: PASS				Y: Social Support			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.57	<.001	3.15	3.99	1.88	<.001	1.56	2.20	6.41	<.001	6.10	6.73	4.92	<.001	4.52	5.31	-0.06	.93	-1.33	1.21
X: AN	-1.37	<.001	-1.94	-0.79	-0.49	0.03	-0.93	-0.06	0.59	.01	0.16	1.02	1.40	<.001	0.86	1.94	-1.08	.002	-1.76	-0.41
MN	1.12	.005	0.34	1.89	2.34	<.001	1.75	2.94	-0.37	.21	-0.95	0.21	-0.69	0.06	-1.43	0.04	0.47	.17	-0.21	1.15
U_1: survey source	-0.40	<.001	-0.62	-0.18	0.13	0.14	-0.04	0.29	0.24	.004	0.08	0.40	0.61	<.001	0.40	0.82	0.39	<.001	0.21	0.58
M_1: Weakness															b_1		0.03	.57	-0.08	0.14
M_2: Exploit															b_2		0.25	<.001	0.13	0.36
M_3: Health															b_3		0.24	.001	0.09	0.39
M_4: PASS															b_4		0.40	<.001	0.30	0.51
W: Condition															c_2'		0.26	.78	-1.61	2.14
XW: AN * Condition															c_3'		0.79	.06	-0.05	1.62
Z1															b_9		-0.29	.71	-1.78	1.21
Z2															b_{10}		0.03	.97	-1.75	1.82
Int_6 : AN x Z1															b_{11}		0.36	.33	-0.37	1.10
Int_7 : AN x Z2															b_{12}		-0.16	.72	-1.06	0.74
Int_18 : AN x W x Z1															b_{23}		0.48	.36	-0.54	1.50
Int_19 : AN x W x Z2															b_{24}		-0.09	.88	-1.28	1.09

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.80	.12	-1.80	0.20
Control-Communal	-1.53	.009	-2.67	-0.38
Control-External	-0.92	.12	-2.08	0.24
Self-Affirmation-Agentic	0.42	.41	-0.59	1.43
Self-Affirmation-Communal	-1.27	.022	-2.35	-0.18
Self-Affirmation-External	-0.04	.94	-0.98	0.91

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Indices of moderated moderated mediation

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.15	-0.14	0.46	-0.02	-0.15	0.09	0.02	-0.18	0.21	-0.07	-0.41	0.26
Z2	0.09	-0.24	0.47	0.11	-0.002	0.28	-0.05	-0.27	0.14	0.02	-0.32	0.33

Indices of conditional Moderated Mediation
by condition (SA vs Control), among:

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.31	-0.04	0.72	0.08	-0.05	0.23	0.01	-0.21	0.23	-0.11	-0.47	0.24
Communal	0.01	-0.48	0.49	0.12	-0.05	0.35	-0.03	-0.35	0.30	0.03	-0.51	0.57
External	0.02	-0.40	0.43	-0.07	-0.23	0.05	0.06	-0.15	0.32	-0.06	-0.41	0.30
by Z1 (Agentic vs Communal Stressor), among:												
Control	-0.03	-0.21	0.14	-0.02	-0.10	0.06	-0.03	-0.15	0.08	0.12	-0.08	0.33
Self-Affirmation	0.12	-0.11	0.38	-0.04	-0.14	0.04	-0.01	-0.18	0.15	0.05	-0.21	0.31
by Z2 (Agentic and Communal vs External Stressor), among:												
Control	0.09	-0.14	0.32	-0.06	-0.16	0.02	-0.02	-0.17	0.12	-0.10	-0.33	0.12
Self-Affirmation	0.18	-0.06	0.47	0.05	-0.02	0.16	-0.07	-0.24	0.07	-0.09	-0.33	0.13

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.03	-0.28	0.23	-0.17	-0.35	-0.02	0.11	-0.02	0.28	0.63	0.31	1.03
Control-Communal	0.03	-0.20	0.28	-0.13	-0.32	0.00	0.16	0.00	0.39	0.40	0.09	0.77
Control-External	-0.13	-0.43	0.17	-0.06	-0.19	0.02	0.16	-0.01	0.40	0.67	0.34	1.06
Self-Affirmation-Agentic	0.28	0.03	0.60	-0.09	-0.23	0.00	0.11	-0.04	0.32	0.53	0.25	0.87
Self-Affirmation-Communal	0.05	-0.35	0.45	-0.01	-0.17	0.13	0.13	-0.11	0.46	0.42	-0.01	0.96
Self-Affirmation-External	-0.11	-0.42	0.17	-0.13	-0.30	-0.01	0.23	0.05	0.47	0.60	0.30	0.97

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

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Table A4.41

*Results from A Second Stage Moderated Moderated Mediation Model with **Social Support Seeking (SS)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																			
	M_1: Weakness				M_2: Exploit				M_3: Health				M_4: PASS				Y: Social Support			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.57	<.001	3.15	3.99	1.88	<.001	1.56	2.20	6.41	<.001	6.10	6.73	4.92	<.001	4.52	5.31	-0.23	.72	-1.49	1.03
AN	-1.37	<.001	-1.94	-0.79	-0.49	0.03	-0.93	-0.06	0.59	.01	0.16	1.02	1.40	<.001	0.86	1.94	-0.57	.023	-1.07	-0.08
MN	1.12	.005	0.34	1.89	2.34	<.001	1.75	2.94	-0.37	.21	-0.95	0.21	-0.69	0.06	-1.43	0.04	-0.04	.92	-0.94	0.85
U_1: survey source	-0.40	<.001	-0.62	-0.18	0.13	0.14	-0.04	0.29	0.24	.004	0.08	0.40	0.61	<.001	0.40	0.82	0.40	<.001	0.21	0.59
M_1: Weakness																b_1	0.04	.43	-0.06	0.15
M_2: Exploit																b_2	0.26	<.001	0.15	0.38
M_3: Health																b_3	0.25	.001	0.10	0.40
M_4: PASS																b_4	0.40	<.001	0.30	0.51
W: Condition																c_2'	0.39	.68	-1.48	2.26
XW: MN * Condition																c_3'	0.83	.16	-0.33	1.99
Z1																b_9	-0.16	.83	-1.63	1.31
Z2																b_{10}	0.04	.96	-1.71	1.80
Int_6 : MN x Z1																b_{11}	-0.09	.87	-1.11	0.94
Int_7 : MN x Z2																b_{12}	-1.12	.06	-2.27	0.03
Int_18 : MN x Condition					x Z1											b_{23}	0.63	.39	-0.79	2.04
Int_19 : MN x Condition					x Z2											b_{24}	1.27	.13	-0.37	2.91

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.69	.36	-2.17	0.80
Control-Communal	-0.52	.50	-2.04	1.00
Control-External	1.07	.14	-0.34	2.49
Self-Affirmation-Agentic	1.40	.05	-0.03	2.83
Self-Affirmation-Communal	0.32	.66	-1.10	1.74
Self-Affirmation-External	0.63	.41	-0.87	2.13

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Indices of moderated moderated mediation

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	-0.27	-0.89	0.20	0.21	-0.80	1.25	-0.01	-0.19	0.13	0.03	-0.16	0.23
Z2	-0.09	-0.40	0.20	-0.58	-1.11	-0.07	0.03	-0.10	0.23	0.01	-0.16	0.22

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	-0.29	-0.72	0.01	-0.42	-1.00	0.16	-0.01	-0.20	0.16	0.06	-0.14	0.29
Communal	-0.02	-0.44	0.38	-0.62	-1.50	0.24	0.02	-0.24	0.29	0.00	-0.32	0.32
External	-0.02	-0.41	0.31	0.35	-0.21	0.91	-0.04	-0.28	0.10	0.01	-0.21	0.21
by Z1 (Agentic vs Communal Stressor), among:												
Control	0.02	-0.13	0.18	0.08	-0.25	0.43	0.02	-0.06	0.13	-0.06	-0.22	0.04
Self-Affirmation	-0.11	-0.36	0.08	0.19	-0.19	0.58	0.01	-0.12	0.14	-0.03	-0.21	0.10
by Z2 (Agentic and Communal vs External Stressor), among:												
Control	-0.07	-0.29	0.11	0.34	-0.01	0.70	0.01	-0.09	0.13	0.04	-0.07	0.19
Self-Affirmation	-0.16	-0.41	0.04	-0.23	-0.62	0.12	0.04	-0.05	0.21	0.05	-0.06	0.24

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.04	-0.18	0.26	0.87	0.41	1.37	-0.07	-0.24	0.05	-0.32	-0.73	0.04
Control-Communal	-0.01	-0.23	0.21	0.70	0.12	1.30	-0.10	-0.36	0.05	-0.20	-0.52	0.02
Control-External	0.12	-0.11	0.42	0.27	-0.11	0.73	-0.10	-0.32	0.05	-0.32	-0.72	0.04
Self-Affirmation-Agentic	-0.25	-0.58	-0.03	0.45	0.09	0.89	-0.07	-0.30	0.05	-0.26	-0.63	0.03
Self-Affirmation-Communal	-0.03	-0.38	0.31	0.08	-0.60	0.75	-0.08	-0.38	0.09	-0.20	-0.59	0.05
Self-Affirmation-External	0.10	-0.15	0.35	0.62	0.25	1.07	-0.15	-0.43	0.06	-0.31	-0.73	0.04

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.42

*Results from A Second Stage Moderated Moderated Mediation Model with **Social Support Seeking (SS)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																	
	M_1: Weakness				M_2: Exploit				M_3: Health				M_4: PASS				Y: Social Support			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	1.02	<.001	0.49	1.55	1.03	<.001	0.60	1.46	7.47	<.001	7.06	7.88	7.10	<.001	6.59	7.62	-0.95	.15	-2.26	0.36
X: Narcissism	0.47	<.001	0.38	0.56	0.23	<.001	0.16	0.31	-0.19	<.001	-0.26	-0.12	-0.38	<.001	-0.46	-0.29	0.13	.033	0.01	0.25
U_1: survey source	-0.20	.05	-0.41	0.00	0.24	.005	0.07	0.40	0.16	.05	0.00	0.31	0.44	<.001	0.25	0.64	0.45	<.001	0.27	0.63
M_1: Weakness																	0.02	.67	-0.08	0.13
M_2: Exploit																	0.23	<.001	0.11	0.34
M_3: Health																	0.26	<.001	0.11	0.40
M_4: PASS																	0.40	<.001	0.29	0.51
W: Condition																	0.44	.66	-1.52	2.39
XW: VN* Condition																	0.02	.86	-0.16	0.19
Z1																	-0.31	.69	-1.88	1.25
Z2																	0.24	.80	-1.59	2.07
Int_6 : VN x Z1																	0.05	.54	-0.10	0.19
Int_7 : VN x Z2																	-0.11	.24	-0.28	0.07
Int_18 : VN x W x Z1																	-0.20	.07	-0.42	0.01
Int_19 : VN x W x Z2																	0.10	.42	-0.15	0.35

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	0.12	.19	-0.06	0.31
Control-Communal	0.03	.77	-0.19	0.25
Control-External	0.24	.034	0.02	0.46
Self-Affirmation-Agentic	-0.01	.94	-0.24	0.22
Self-Affirmation-Communal	0.30	.008	0.08	0.52
Self-Affirmation-External	0.15	.17	-0.06	0.37

Indices of moderated moderated mediation

	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	-0.03	-0.14	0.07	0.02	-0.03	0.07	-0.01	-0.07	0.04	0.03	-0.06	0.12
Z2	-0.04	-0.16	0.08	-0.05	-0.10	0.00	0.02	-0.04	0.08	-0.01	-0.09	0.08

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Indices of conditional Moderated Mediation												
by condition (SA vs Control), among:												
	M_1: Weakness			M_2: Exploit			M_3: Health			M_4: PASS		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	-0.11	-0.24	0.03	-0.02	-0.07	0.04	0.00	-0.08	0.06	0.03	-0.07	0.13
Communal	-0.04	-0.19	0.12	-0.06	-0.15	0.03	0.02	-0.07	0.12	-0.03	-0.17	0.11
External	-0.01	-0.15	0.13	0.03	-0.02	0.09	-0.02	-0.09	0.05	0.01	-0.08	0.11
by Z1 (Agentic vs Communal Stressor), among:												
Control	0.01	-0.05	0.07	0.01	-0.03	0.05	0.01	-0.02	0.05	-0.04	-0.09	0.02
Self-Affirmation	-0.03	-0.11	0.05	0.03	-0.01	0.07	0.00	-0.05	0.05	-0.01	-0.08	0.06
by Z2 (Agentic and Communal vs External Stressor), among:												
Control	-0.01	-0.09	0.06	0.03	-0.01	0.06	0.00	-0.04	0.04	0.03	-0.03	0.09
Self-Affirmation	-0.05	-0.14	0.03	-0.02	-0.06	0.01	0.02	-0.03	0.06	0.02	-0.04	0.08

Conditional Indirect Effects of X on Y												
	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.01	-0.07	0.09	0.07	0.03	0.12	-0.04	-0.08	0.01	-0.17	-0.26	-0.09
Control-Communal	0.00	-0.09	0.09	0.06	0.00	0.12	-0.06	-0.12	-0.01	-0.10	-0.18	-0.02
Control-External	0.02	-0.08	0.13	0.03	-0.01	0.07	-0.05	-0.11	0.00	-0.18	-0.27	-0.11
Self-Affirmation-Agentic	-0.09	-0.20	0.01	0.05	0.02	0.10	-0.04	-0.10	0.01	-0.14	-0.23	-0.07
Self-Affirmation-Communal	-0.04	-0.16	0.09	0.00	-0.06	0.06	-0.04	-0.13	0.03	-0.13	-0.25	-0.01
Self-Affirmation-External	0.02	-0.09	0.12	0.06	0.02	0.11	-0.07	-0.12	-0.02	-0.17	-0.24	-0.10

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.43

*Results from A Second Stage Moderated Moderated Mediation Model with **Risky Ingestion (RI)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable															
	M_1: Impulsivity					M_2: Self-Protection				M_3: Self-Enhancement				Y: Risky Ingestion			
	coeff.		*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.38		<.001	4.15	4.61	2.97	<.001	2.63	3.30	4.12	<.001	3.99	4.25	1.25	.010	0.30	2.19
X: Narcissism	0.18		.64	-0.57	0.93	0.63	.026	0.08	1.18	3.16	<.001	2.74	3.57	-1.19	.035	-2.29	-0.09
U_1: survey source						-0.16	.07	-0.34	0.01								
M_1: Impulsivity												b_1		0.36	<.001	0.26	0.45
M_2: Self-Protection												b_2		0.34	<.001	0.21	0.48
M_3: Self-Enhancement												b_3		-0.15	.10	-0.33	0.03
W: Condition												c_2'		0.15	.82	-1.14	1.44
XW: GN * Condition												c_3'		2.29	.004	0.75	3.82
Z1												b_7		0.93	.13	-0.26	2.12
Z2												b_8		-0.90	.18	-2.20	0.40
Int_6	:	GN	x	Z1								b_9		0.70	.31	-0.66	2.06
Int_7	:	GN	x	Z2								b_{10}		-0.98	.21	-2.53	0.57
Int_18	:	GN	x	W		x	Z1					b_{19}		-0.75	.44	-2.67	1.16
Int_19	:	GN	x	W		x	Z2					b_{20}		-0.31	.77	-2.44	1.81

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.98	.30	-2.84	0.88
Control-Communal	-2.38	.019	-4.35	-0.40
Control-External	-0.21	.83	-2.09	1.67
Self-Affirmation-Agentic	0.40	.66	-1.41	2.21
Self-Affirmation-Communal	0.51	.62	-1.50	2.51
Self-Affirmation-External	2.39	.007	0.67	4.11

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Indices of moderated moderated mediation	M_1: Weakness			M_2: Exploit			M_3: Self-Enhancement		
	Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.00	-0.08	0.08	0.08	-0.06	0.31	1.09	0.04	2.14
Z2	0.00	-0.11	0.09	-0.03	-0.23	0.15	-0.32	-1.54	0.78

Indices of conditional Moderated Mediation									
by condition (SA vs Control), among:									
	M_1: Impulsivity			M_2: Self-Protection			M_3: Self-Enhancement		
	Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.00	-0.11	0.12	-0.05	-0.31	0.17	0.78	-0.65	2.18
Communal	0.00	-0.10	0.11	-0.22	-0.60	0.01	-1.40	-2.96	0.15
External	0.01	-0.12	0.15	-0.09	-0.37	0.11	0.17	-1.13	1.68
by Z1 (Agentic vs Communal Stressor), among:									
Control	0.01	-0.04	0.07	-0.06	-0.23	0.04	-0.59	-1.42	0.22
Self-Affirmation	0.01	-0.05	0.08	0.02	-0.09	0.15	0.50	-0.17	1.16
by Z2 (Agentic and Communal vs External Stressor), among:									
Control	0.01	-0.06	0.11	0.01	-0.13	0.16	0.57	-0.23	1.52
Self-Affirmation	0.01	-0.06	0.09	-0.02	-0.16	0.10	0.25	-0.52	1.02

Conditional Indirect Effects of X on Y	effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.07	-0.25	0.42	0.16	0.00	0.40	-0.79	-1.85	0.28
Control-Communal	0.06	-0.22	0.36	0.29	0.03	0.65	0.40	-0.86	1.61
Control-External	0.05	-0.20	0.33	0.20	0.01	0.49	-1.05	-2.26	-0.14
Self-Affirmation-Agentic	0.08	-0.26	0.44	0.10	-0.05	0.34	0.00	-0.94	0.92
Self-Affirmation-Communal	0.06	-0.22	0.37	0.07	-0.09	0.25	-1.00	-1.97	-0.06
Self-Affirmation-External	0.06	-0.21	0.36	0.11	-0.02	0.31	-0.88	-1.85	0.07

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.44

*Results from A Second Stage Moderated Moderated Mediation Model with **Risky Ingestion (RI)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable															
	M_1: Impulsivity				M_2: Self-Protection				M_3: Self-Enhancement				Y: Risky Ingestion			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	1.42	.003	0.49	2.35
AN	-1.87	<.001	-2.47	-1.27	-0.74	.002	-1.21	-0.28	2.06	<.001	1.70	2.41	-0.74	.08	-1.58	0.10
MN	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	0.13	-0.11	0.86	0.38	.36	0.36	0.36
U_1: survey source					-0.25	.005	-0.43	-0.08								
M_1: Impulsivity												b_1	0.34	<.001	0.24	0.44
M_2: Self-Protection												b_2	0.32	<.001	0.18	0.46
M_3: Self-Enhancement												b_3	-0.19	.034	-0.37	-0.01
W: Condition												c_2'	-0.08	.91	-1.35	1.19
XW: AN* Condition												c_3'	0.95	.09	-0.15	2.05
Z1												b_7	0.80	.18	-0.36	1.96
Z2												b_8	-0.77	.24	-2.06	0.52
Int_6 : AN x Z1												b_9	0.45	.35	-0.49	1.38
Int_7 : AN x Z2												b_{10}	-1.36	.020	-2.50	-0.22
Int_18 : AN x W x Z1												b_{19}	-0.59	.40	-1.94	0.77
Int_19 : AN x W x Z2												b_{20}	-0.11	.89	-1.66	1.44

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.97	.14	-2.25	0.31
Control-Communal	-1.86	.011	-3.29	-0.44
Control-External	0.62	.41	-0.85	2.08
Self-Affirmation-Agentic	-0.66	.34	-2.02	0.69
Self-Affirmation-Communal	-0.38	.61	-1.86	1.09
Self-Affirmation-External	1.68	.009	0.42	2.94

Indices of moderated moderated mediation

	M_1: Weakness			M_2: Exploit			M_3: Self-Enhancement		
	Index	*CI*		Index	*CI*		Index	*CI*	
Z1	-0.01	-0.32	0.29	-0.09	-0.30	0.09	0.69	0.05	1.36
Z2	0.01	-0.39	0.39	0.03	-0.17	0.26	-0.16	-1.00	0.55

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Indices of conditional Moderated Mediation									
by condition (SA vs Control), among:									
	M_1: Impulsivity			M_2: Self-Protection			M_3: Self-Enhancement		
	Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	-0.07	-0.51	0.40	0.05	-0.20	0.33	0.68	-0.22	1.59
Communal	-0.04	-0.45	0.37	0.24	-0.02	0.57	-0.71	-1.64	0.22
External	-0.07	-0.55	0.44	0.10	-0.15	0.36	0.23	-0.66	1.28
by Z1 (Agentic vs Communal Stressor), among:									
Control	-0.06	-0.26	0.12	0.07	-0.07	0.22	-0.32	-0.82	0.16
Self-Affirmation	-0.08	-0.33	0.15	-0.03	-0.17	0.10	0.37	-0.06	0.80
by Z2 (Agentic and Communal vs External Stressor), among:									
Control	-0.06	-0.36	0.23	0.00	-0.16	0.15	0.45	-0.10	1.10
Self-Affirmation	-0.05	-0.32	0.20	0.03	-0.10	0.18	0.29	-0.22	0.78

Conditional Indirect Effects of X on Y									
	effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.73	-1.13	-0.40	-0.17	-0.39	-0.01	-0.49	-1.15	0.12
Control-Communal	-0.60	-0.98	-0.28	-0.30	-0.60	-0.07	0.16	-0.60	0.88
Control-External	-0.57	-1.05	-0.19	-0.24	-0.48	-0.05	-0.85	-1.71	-0.19
Self-Affirmation-Agentic	-0.81	-1.30	-0.37	-0.12	-0.35	0.06	0.19	-0.47	0.81
Self-Affirmation-Communal	-0.65	-1.02	-0.32	-0.06	-0.26	0.11	-0.55	-1.15	0.01
Self-Affirmation-External	-0.65	-1.04	-0.28	-0.14	-0.35	0.01	-0.61	-1.23	0.00

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.45

*Results from A Second Stage Moderated Moderated Mediation Model with **Risky Ingestion (RI)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

					Outcome variable											
					M_1: Impulsivity				M_2: Self-Protection				M_3: Self-Enhancement				Y: Risky Ingestion			
					coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant					4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	1.35	.005	0.41	2.30
AN					-1.87	<.001	-2.47	-1.27	-0.74	.002	-1.21	-0.28	2.06	<.001	1.70	2.41	-0.20	.54	-0.82	0.43
MN					3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	0.13	-0.11	0.86	-0.59	.28	-1.68	0.49
U_1: survey source									-0.25	.005	-0.43	-0.08								
M_1: Impulsivity																b_1	0.36	<.001	0.26	0.46
M_2: Self-Protection																b_2	0.34	<.001	0.21	0.48
M_3: Self-Enhancement																b_3	-0.20	.023	-0.37	-0.03
W: Condition																c_2'	0.02	.98	-1.27	1.30
XW: MN * Condition																c_3'	1.77	.015	0.34	3.20
Z1																b_7	0.91	.13	-0.28	2.09
Z2																b_8	-0.78	.24	-2.09	0.52
Int_6	:	MN	x	Z1												b_9	0.74	.25	-0.53	2.02
Int_7	:	MN	x	Z2												b_{10}	-0.32	.66	-1.72	1.09
Int_18	:	MN	x	W	x	Z1										b_{19}	-0.69	.45	-2.47	1.09
Int_19	:	MN	x	W	x	Z2										b_{20}	-1.04	.30	-3.03	0.94

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.01	.99	-1.83	1.82
Control-Communal	-1.49	.12	-3.37	0.38
Control-External	-0.28	.75	-1.97	1.42
Self-Affirmation-Agentic	0.55	.53	-1.18	2.28
Self-Affirmation-Communal	0.45	.64	-1.41	2.30
Self-Affirmation-External	2.53	.005	0.79	4.28

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Indices of moderated moderated mediation	M_1: Impulsivity			M_2: Self-Protection			M_3: Self-Enhancement		
	Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.05	-0.52	0.60	0.24	-0.18	0.70	0.12	-0.04	0.37
Z2	0.02	-0.66	0.73	-0.06	-0.55	0.40	-0.03	-0.22	0.11

Indices of conditional Moderated Mediation	M_1: Impulsivity			M_2: Self-Protection			M_3: Self-Enhancement		
by condition (SA vs Control), among:									
	Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.05	-0.84	0.83	-0.16	-0.75	0.42	0.13	-0.06	0.43
Communal	-0.05	-0.80	0.69	-0.64	-1.36	-0.01	-0.12	-0.43	0.08
External	-0.03	-0.94	0.82	-0.31	-0.89	0.26	0.05	-0.11	0.29
by Z1 (Agentic vs Communal Stressor), among:									
Control	0.07	-0.27	0.43	-0.18	-0.52	0.13	-0.06	-0.22	0.04
Self-Affirmation	0.12	-0.32	0.55	0.06	-0.23	0.37	0.06	-0.03	0.20
by Z2 (Agentic and Communal vs External Stressor), among:									
Control	0.16	-0.35	0.67	0.03	-0.33	0.41	0.04	-0.05	0.22
Self-Affirmation	0.18	-0.28	0.67	-0.03	-0.35	0.27	0.01	-0.08	0.14

Conditional Indirect Effects of X on Y	effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	1.31	0.79	1.94	0.44	0.05	0.88	-0.11	-0.35	0.04
Control-Communal	1.18	0.61	1.79	0.80	0.28	1.41	0.01	-0.16	0.20
Control-External	1.00	0.37	1.80	0.57	0.12	1.07	-0.12	-0.38	0.03
Self-Affirmation-Agentic	1.36	0.62	2.17	0.28	-0.15	0.77	0.01	-0.12	0.17
Self-Affirmation-Communal	1.12	0.58	1.73	0.16	-0.26	0.57	-0.11	-0.32	0.04
Self-Affirmation-External	0.97	0.39	1.58	0.26	-0.07	0.66	-0.07	-0.27	0.04

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Appendix A – Tables Chapter 4

Table A4.46

*Results from A Second Stage Moderated Moderated Mediation Model with **Risky Ingestion (RI)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable															
	M_1: Impulsivity					M_2: Self-Protection				M_3: Self-Enhancement				Y: Risky Ingestion			
	coeff.	*p*	*CI*			coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	1.73	<.001	1.32	2.14		1.88	<.001	1.44	2.32	5.20	<.001	4.91	5.49	1.53	.003	0.53	2.53
X: Narcissism	0.64	<.001	0.55	0.73		0.29	<.001	0.21	0.36	-0.06	.09	-0.12	0.01	-0.04	.65	-0.19	0.12
U_1: survey source						-0.14	.11	-0.31	0.03								
M_1: Impulsivity												b_1		0.36	<.001	0.25	0.47
M_2: Self-Protection												b_2		0.34	<.001	0.20	0.48
M_3: Self-Enhancement												b_3		-0.24	.003	-0.40	-0.08
W: Condition												c_2'		-0.52	.47	-1.93	0.89
XW: VN * Condition												c_3'		0.14	.20	-0.08	0.36
Z1												b_7		0.79	.21	-0.44	2.01
Z2												b_8		-0.54	.46	-1.94	0.87
Int_6 : VN x Z1												b_9		-0.03	.78	-0.22	0.17
Int_7 : VN x Z2												b_{10}		-0.07	.53	-0.28	0.15
Int_18 : VN x W						x Z1						b_{19}		-0.09	.52	-0.36	0.18
Int_19 : VN x W						x Z2						b_{20}		-0.08	.61	-0.38	0.22

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.10	.46	-0.36	0.16
Control-Communal	-0.04	.77	-0.33	0.24
Control-External	0.03	.81	-0.22	0.29
Self-Affirmation-Agentic	-0.08	.52	-0.34	0.17
Self-Affirmation-Communal	0.15	.29	-0.12	0.42
Self-Affirmation-External	0.25	.06	-0.01	0.52

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Indices of moderated moderated mediation

	M_1: Impulsivity			M_2: Self-Protection			M_3: Self-Enhancement		
	Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.01	-0.11	0.13	0.04	-0.03	0.11	-0.02	-0.05	0.01
Z2	0.02	-0.12	0.16	-0.01	-0.09	0.07	0.01	-0.01	0.04

Indices of conditional Moderated Mediation
by condition (SA vs Control), among:

	M_1: Impulsivity			M_2: Self-Protection			M_3: Self-Enhancement		
	Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.01	-0.17	0.19	-0.03	-0.13	0.06	-0.02	-0.06	0.01
Communal	-0.01	-0.17	0.14	-0.10	-0.22	0.00	0.01	-0.01	0.05
External	-0.03	-0.21	0.15	-0.06	-0.15	0.04	-0.01	-0.06	0.01
by Z1 (Agentic vs Communal Stressor), among:									
Control	0.04	-0.05	0.12	-0.02	-0.07	0.03	0.01	-0.01	0.03
Self-Affirmation	0.05	-0.04	0.13	0.02	-0.03	0.07	-0.01	-0.03	0.01
by Z2 (Agentic and Communal vs External Stressor), among:									
Control	0.04	-0.06	0.15	0.01	-0.05	0.07	-0.01	-0.03	0.01
Self-Affirmation	0.06	-0.04	0.16	0.00	-0.06	0.05	0.00	-0.01	0.02

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.29	0.17	0.41	0.08	0.01	0.15	0.02	-0.01	0.06
Control-Communal	0.21	0.10	0.34	0.12	0.04	0.21	0.00	-0.02	0.03
Control-External	0.19	0.06	0.33	0.09	0.02	0.16	0.02	-0.01	0.06
Self-Affirmation-Agentic	0.30	0.16	0.44	0.05	-0.02	0.12	0.00	-0.02	0.02
Self-Affirmation-Communal	0.21	0.10	0.32	0.02	-0.06	0.08	0.02	0.00	0.05
Self-Affirmation-External	0.16	0.04	0.29	0.04	-0.03	0.11	0.01	-0.01	0.03

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.47

*Results from A Second Stage Moderated Moderated Mediation Model with **Planful Problem Solving (PPS)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																							
	M_1: BAS				M_2: I				M_3: SP				M_4: SE				M_5: Optimism				Y: PPS			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.77	<.001	4.64	4.91	4.39	<.001	4.16	4.62	2.96	<.001	2.62	3.30	4.12	<.001	3.99	4.24	3.80	<.001	3.61	3.99	3.03	<.001	2.02	4.04
X: Narcissism	3.36	<.001	2.93	3.80	0.16	.68	-0.60	0.91	0.62	.029	0.06	1.17	3.15	<.001	2.73	3.57	2.93	<.001	2.31	3.55	-0.73	.18	-1.80	0.34
U_1: survey source									-0.16	.08	-0.34	0.02												
M_1: BAS																					0.15	.06	0.00	0.31
M_2: Impulsivity																					-0.04	.42	-0.14	0.06
M_3: Self Protection																					-0.23	<.001	-0.35	-0.11
M_4: Self Enhancement																					0.50	<.001	0.32	0.68
M_5: Optimism																					0.07	.31	-0.06	0.20
W: Condition																					0.26	.71	-1.14	1.66
XW: GN * Condition																					0.06	.94	-1.41	1.53
Z1																					0.23	.73	-1.07	1.52
Z2																					-0.06	.93	-1.43	1.31
Int_6:	GN	x	Z1																		-0.20	.77	-1.50	1.11
Int_7:	GN	x	Z2																		0.63	.41	-0.89	2.16
Int_18:	GN	x	W		x	Z1															0.38	.68	-1.44	2.20
Int_19:	GN	x	W		x	Z2															-0.84	.42	-2.89	1.21

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.61	.49	-2.35	1.12
Control-Communal	-0.22	.83	-2.17	1.73
Control-External	-1.37	.15	-3.24	0.51
Self-Affirmation-Agentic	-0.60	.51	-2.39	1.20
Self-Affirmation-Communal	-0.96	.30	-2.77	0.85
Self-Affirmation-External	-0.47	.57	-2.09	1.15

Indices of moderated moderated mediation

	M_1: BAS			M_2: I			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	-0.02	-0.99	1.03	0.00	-0.09	0.11	0.06	-0.10	0.24	-0.01	-1.03	1.02	-0.26	-1.06	*0.40*
Z2	0.43	-0.68	1.58	-0.01	-0.15	0.09	-0.10	-0.31	0.05	0.55	-0.67	1.89	-0.36	-1.18	*0.42*

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BAS			M_2: I			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.59	-0.75	1.96	-0.02	-0.18	0.11	0.02	-0.19	0.23	0.17	-1.27	1.55	-0.68	-1.62	0.08
Communal	0.63	-0.91	2.14	-0.02	-0.25	0.13	-0.09	-0.38	0.14	0.19	-1.31	1.64	-0.16	-1.33	1.08
External	-0.03	-1.42	1.28	0.00	-0.13	0.11	0.11	-0.06	0.36	-0.65	-2.35	0.85	0.13	-0.81	1.02
by Z1 (Agentic vs Communal Stressor), among:															
Control	0.02	-0.75	0.70	0.01	-0.08	0.13	-0.02	-0.15	0.10	-0.14	-0.89	0.56	0.10	-0.44	0.72
Self-Affirmation	0.00	-0.71	0.69	0.01	-0.06	0.12	0.03	-0.06	0.15	-0.15	-0.88	0.58	-0.16	-0.65	0.26
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	-0.49	-1.38	0.37	0.02	-0.10	0.18	0.03	-0.09	0.17	-0.40	-1.44	0.50	0.26	-0.34	0.88
Self-Affirmation	-0.06	-0.76	0.67	0.01	-0.06	0.11	-0.07	-0.20	0.03	0.16	-0.67	0.93	-0.10	-0.59	0.41

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.29	-0.66	1.18	0.02	-0.09	0.15	-0.15	-0.37	0.00	1.24	0.21	2.35	0.43	-0.13	1.08
Control-Communal	0.25	-0.83	1.47	-0.01	-0.16	0.12	-0.10	-0.35	0.06	1.52	0.61	2.57	0.22	-0.78	1.17
Control-External	1.00	-0.05	2.16	-0.03	-0.21	0.13	-0.17	-0.41	-0.01	1.98	0.86	3.46	-0.06	-0.74	0.63
Self-Affirmation-Agentic	0.88	-0.12	1.91	0.00	-0.07	0.08	-0.13	-0.33	0.01	1.41	0.50	2.34	-0.25	-0.91	0.29
Self-Affirmation-Communal	0.88	-0.08	1.94	-0.03	-0.23	0.12	-0.19	-0.44	-0.01	1.71	0.56	2.89	0.07	-0.58	0.76
Self-Affirmation-External	0.97	0.16	1.77	-0.03	-0.22	0.13	-0.06	-0.22	0.05	1.33	0.37	2.39	0.06	-0.58	0.65

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Appendix A – Tables Chapter 4

Table A4.48

*Results from A Second Stage Moderated Moderated Mediation Model with **Planful Problem Solving (PPS)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																					
	M_1: BAS				M_2: I				M_3: SP				M_4: SE				M_5: Optimism				Y: PPS			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*P*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.81	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.82	3.50	4.18	<.001	4.05	4.30	3.87	<.001	3.68	4.06	3.02	<.001	2.04	4.00
X: Narcissism	1.40	<.001	1.03	1.77	-1.89	<.001	-2.49	-1.29	-0.77	.001	-1.23	-0.30	2.04	<.001	1.68	2.39	2.66	<.001	2.14	3.18	0.01	.98	-0.77	0.79
	1.84	<.001	1.34	2.35	3.24	<.001	2.41	4.06	1.77	<.001	1.14	2.40	0.39	.11	-0.09	0.88	-0.95	.008	-1.65	-0.24	-0.88	.020	0.02	0.02
U_1: survey source									-0.24	.006	-0.42	-0.07												
M_1: BAS																					0.17	.036	0.01	0.32
M_2: Impulsivity																					-0.04	.49	-0.14	0.06
M_3: Self Protection																					-0.22	<.001	-0.34	-0.10
M_4: Self Enhancement																					0.49	<.001	0.31	0.67
M_5: Optimism																					0.05	.43	-0.08	0.18
W: Condition																					0.46	.51	-0.90	1.82
XW: AN * Condition																					0.51	.33	-0.52	1.54
Z1																					0.27	.67	-0.97	1.51
Z2																					-0.11	.87	-1.43	1.22
Int_6:	AN	x	Z1																		-0.09	.84	-0.98	0.80
Int_7:	AN	x	Z2																		0.48	.38	-0.59	1.56
Int_18:	AN	x	W		x	Z1															0.64	.32	-0.63	1.91
Int_19:	AN	x	W		x	Z2															-0.48	.52	-1.93	0.97

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	0.16	.79	-1.02	1.34
Control-Communal	0.34	.62	-1.03	1.72
Control-External	-0.47	.50	-1.83	0.89
Self-Affirmation-Agentic	1.07	.10	-0.22	2.36
Self-Affirmation-Communal	-0.02	.97	-1.35	1.30
Self-Affirmation-External	0.52	.38	-0.64	1.68

Appendix A – Tables Chapter 4

Indices of moderated moderated mediation

	M_1: BAS			M_2: I			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	-0.03	-0.43	0.41	-0.02	-0.38	0.39	-0.07	-0.28	0.11	-0.08	-0.74	0.56	-0.26	-0.99	0.36
Z2	0.14	-0.30	0.62	0.16	-0.24	0.57	0.13	-0.06	0.34	0.36	-0.42	1.23	-0.33	-1.05	0.37

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BAS			M_2: I			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.15	-0.39	0.73	0.21	-0.19	0.67	-0.02	-0.28	0.21	-0.04	-0.97	0.88	-0.64	-1.47	0.06
Communal	0.21	-0.43	0.82	0.26	-0.40	0.87	0.12	-0.16	0.43	0.13	-0.79	1.03	-0.12	-1.18	1.02
External	-0.03	-0.58	0.50	-0.01	-0.49	0.44	-0.14	-0.39	0.07	-0.49	-1.63	0.47	0.12	-0.71	0.92
by Z1 (Agentic vs Communal Stressor), among:															
Control	-0.01	-0.34	0.28	-0.16	-0.50	0.13	0.03	-0.11	0.19	-0.10	-0.57	0.36	0.11	-0.40	0.68
Self-Affirmation	-0.05	-0.32	0.25	-0.19	-0.40	0.04	-0.04	-0.17	0.07	-0.19	-0.65	0.27	-0.15	-0.58	0.23
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	-0.19	-0.56	0.15	-0.28	-0.61	0.02	-0.05	-0.19	0.10	-0.27	-0.96	0.32	0.23	-0.33	0.77
Self-Affirmation	-0.05	-0.34	0.24	-0.12	-0.39	0.14	0.08	-0.04	0.23	0.09	-0.43	0.61	-0.11	-0.56	0.35

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.13	-0.27	0.52	-0.24	-0.56	0.06	0.18	0.01	0.43	0.76	0.11	1.51	0.36	-0.14	0.93
Control-Communal	0.15	-0.29	0.65	0.09	-0.42	0.65	0.11	-0.09	0.38	0.97	0.38	1.62	0.14	-0.82	1.02
Control-External	0.42	0.00	0.92	0.34	0.03	0.74	0.21	0.04	0.44	1.26	0.51	2.25	-0.09	-0.68	0.55
Self-Affirmation-Agentic	0.27	-0.12	0.71	-0.02	-0.31	0.28	0.15	0.01	0.35	0.72	0.13	1.37	-0.28	-0.86	0.22
Self-Affirmation-Communal	0.36	-0.04	0.80	0.35	-0.01	0.68	0.23	0.05	0.49	1.10	0.38	1.85	0.02	-0.56	0.64
Self-Affirmation-External	0.39	0.07	0.76	0.34	0.02	0.70	0.07	-0.06	0.25	0.77	0.14	1.47	0.04	-0.53	0.56

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.49

*Results from A Second Stage Moderated Moderated Mediation Model with **Planful Problem Solving (PPS)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																							
	M_1: BAS				M_2: I				M_3: SP				M_4: SE				M_5: Optimism				Y: PPS			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.81	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.82	3.50	4.18	<.001	4.05	4.30	3.87	<.001	3.68	4.06	3.12	<.001	2.13	4.11
X: Narcissism	1.40	<.001	1.03	1.77	-1.89	<.001	-2.49	-1.29	-0.77	.001	-1.23	-0.30	2.04	<.001	1.68	2.39	2.66	<.001	2.14	3.18	0.25	.38	-0.31	0.82
	1.84	<.001	1.34	2.35	3.24	<.001	2.41	4.06	1.77	<.001	1.14	2.40	0.39	.11	-0.09	0.88	-0.95	.008	-1.65	-0.24	-0.81	.12	-1.83	0.21
U_1: survey source									-0.24	.006	-0.42	-0.07												
M_1: BAS																					0.15	.06	-0.01	0.31
M_2: Impulsivity																					-0.03	.54	-0.13	0.07
M_3: Self Protection																					-0.22	<.001	-0.35	-0.10
M_4: Self Enhancement																					0.46	<.001	0.29	0.64
M_5: Optimism																					0.05	.42	-0.08	0.18
W: Condition																					0.19	.79	-1.18	1.56
XW: MN * Condition																					-0.03	.96	-1.37	1.31
Z1																					0.12	.85	-1.13	1.38
Z2																					0.06	.93	-1.28	1.40
Int_6:	MN	x	Z1																		-0.48	.44	-1.68	0.72
Int_7:	MN	x	Z2																		0.98	.15	-0.36	2.33
Int_18:	MN	x	W		x	Z1															-0.11	.90	-1.77	1.55
Int_19:	MN	x	W		x	Z2															-0.88	.36	-2.75	1.00

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.80	.35	-2.46	0.87
Control-Communal	0.16	.86	-1.64	1.96
Control-External	-1.79	.032	-3.43	-0.15
Self-Affirmation-Agentic	-1.38	.10	-3.01	0.26
Self-Affirmation-Communal	-0.20	.81	-1.87	1.47
Self-Affirmation-External	-0.95	.25	-2.56	0.67

Indices of moderated moderated mediation

	M_1: BAS			M_2: I			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.02	-0.54	0.58	0.05	-0.63	0.69	0.15	-0.26	0.56	0.01	-0.14	0.17	0.09	-0.13	0.41
Z2	0.27	-0.32	0.92	-0.17	-0.87	0.50	-0.26	-0.70	0.17	0.05	-0.11	0.30	0.12	-0.14	0.42

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BAS			M_2: I			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.38	-0.33	1.15	-0.31	-1.07	0.44	0.06	-0.46	0.61	0.02	-0.19	0.24	0.22	-0.03	0.61
Communal	0.35	-0.48	1.23	-0.40	-1.46	0.70	-0.23	-0.88	0.40	0.00	-0.23	0.22	0.04	-0.42	0.44
External	-0.04	-0.79	0.67	-0.10	-0.85	0.69	0.31	-0.18	0.82	-0.07	-0.39	0.13	-0.05	-0.38	0.26
by Z1 (Agentic vs Communal Stressor), among:															
Control	0.03	-0.40	0.42	0.30	-0.19	0.85	-0.05	-0.37	0.28	-0.02	-0.15	0.08	-0.04	-0.28	0.14
Self-Affirmation	0.05	-0.36	0.41	0.35	-0.05	0.76	0.10	-0.15	0.37	-0.01	-0.13	0.09	0.05	-0.09	0.23
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	-0.31	-0.82	0.16	0.40	-0.10	0.95	0.08	-0.25	0.40	-0.04	-0.24	0.08	-0.08	-0.32	0.11
Self-Affirmation	-0.04	-0.41	0.36	0.23	-0.20	0.68	-0.19	-0.49	0.09	0.01	-0.11	0.14	0.03	-0.14	0.22

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.15	-0.38	0.65	0.40	-0.10	0.95	-0.40	-0.87	-0.03	0.14	-0.03	0.42	-0.13	-0.41	0.05
Control-Communal	0.09	-0.53	0.77	-0.20	-1.12	0.66	-0.31	-0.87	0.17	0.18	-0.04	0.48	-0.05	-0.38	0.32
Control-External	0.59	0.01	1.24	-0.50	-1.12	0.04	-0.47	-0.89	-0.10	0.22	-0.05	0.64	0.03	-0.20	0.28
Self-Affirmation-Agentic	0.53	0.01	1.09	0.10	-0.45	0.67	-0.34	-0.73	0.00	0.16	-0.03	0.43	0.09	-0.10	0.33
Self-Affirmation-Communal	0.44	-0.08	1.07	-0.61	-1.18	0.01	-0.54	-1.00	-0.16	0.18	-0.04	0.50	-0.01	-0.27	0.21
Self-Affirmation-External	0.55	0.11	0.99	-0.60	-1.15	-0.07	-0.16	-0.52	0.15	0.16	-0.03	0.44	-0.01	-0.23	0.20

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Appendix A – Tables Chapter 4

Table A4.50

*Results from A Second Stage Moderated Moderated Mediation Model with **Planful Problem Solving (PPS)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																					
	M_1: BAS				M_2: I				M_3: SP				M_4: SE				M_5: Optimism				Y: PPS			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	5.66	<.001	5.36	5.97	1.73	<.001	1.32	2.14	1.88	<.001	1.43	2.32	5.21	<.001	4.92	5.50	6.53	<.001	6.15	6.90	3.60	<.001	2.55	4.65
X: Narcissism	0.00	.99	-0.07	0.07	0.64	<.001	0.55	0.73	0.29	<.001	0.21	0.36	-0.06	.07	-0.13	0.01	-0.46	<.001	-0.55	-0.38	-0.14	.06	-0.28	0.00
U_1: survey source									-0.13	.13	-0.30	0.04												
M_1: BAS																					0.12	.13	-0.03	0.26
M_2: Impulsivity																					-0.01	.91	-0.11	0.10
M_3: Self Protection																					-0.20	.001	-0.33	-0.08
M_4: Self Enhancement																					0.50	<.001	0.33	0.68
M_5: Optimism																					0.02	.76	-0.11	0.15
W: Condition																					0.33	.66	-1.14	1.79
XW: VN * Condition																					0.00	.98	-0.20	0.20
Z1																					0.52	.43	-0.78	1.83
Z2																					-0.13	.86	-1.58	1.32
Int_6:	VN	x	Z1																		-0.11	.21	-0.29	0.07
Int_7:	VN	x	Z2																		-0.04	.66	-0.24	0.15
Int_18:	VN	x	W		x	Z1															0.09	.47	-0.16	0.34
Int_19:	VN	x	W		x	Z2															-0.05	.70	-0.33	0.22

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.27	.027	-0.51	-0.03
Control-Communal	-0.05	.72	-0.31	0.21
Control-External	-0.09	.43	-0.33	0.14
Self-Affirmation-Agentic	-0.21	.08	-0.44	0.03
Self-Affirmation-Communal	-0.16	.20	-0.41	0.08
Self-Affirmation-External	-0.04	.77	-0.28	0.21

Indices of moderated moderated mediation

	M_1: BAS			M_2: I			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.00	-0.01	0.01	-0.01	-0.16	0.11	0.01	-0.06	0.08	0.00	-0.02	0.02	0.03	-0.07	0.16
Z2	0.00	-0.01	0.01	-0.05	-0.20	0.08	-0.05	-0.12	0.03	-0.01	-0.05	0.01	0.07	-0.06	0.20

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BAS			M_2: I			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.00	-0.02	0.02	-0.10	-0.26	0.05	0.00	-0.09	0.08	0.00	-0.04	0.03	0.10	-0.03	0.26
Communal	0.00	-0.02	0.03	-0.08	-0.28	0.16	-0.03	-0.13	0.08	0.00	-0.03	0.03	0.03	-0.15	0.20
External	0.00	-0.02	0.02	-0.01	-0.16	0.16	0.05	-0.03	0.13	0.01	-0.01	0.07	-0.04	-0.19	0.11
by Z1 (Agentic vs Communal Stressor), among:															
Control	0.00	-0.01	0.01	0.08	-0.03	0.20	0.00	-0.05	0.05	0.00	-0.01	0.02	0.00	-0.10	0.08
Self-Affirmation	0.00	-0.01	0.01	0.07	-0.01	0.14	0.01	-0.03	0.05	0.00	-0.01	0.02	0.03	-0.03	0.11
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	0.00	-0.01	0.01	0.10	0.00	0.21	0.02	-0.03	0.07	0.01	-0.01	0.04	-0.04	-0.14	0.06
Self-Affirmation	0.00	-0.01	0.01	0.05	-0.04	0.14	-0.02	-0.07	0.02	0.00	-0.02	0.02	0.03	-0.05	0.11

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.00	-0.01	0.02	0.13	0.01	0.25	-0.05	-0.12	0.01	-0.02	-0.07	0.00	-0.03	-0.14	0.07
Control-Communal	0.00	-0.01	0.02	-0.03	-0.22	0.15	-0.05	-0.13	0.03	-0.03	-0.08	0.01	-0.03	-0.17	0.13
Control-External	0.00	-0.02	0.02	-0.11	-0.23	0.00	-0.08	-0.14	-0.02	-0.04	-0.10	0.01	0.03	-0.08	0.15
Self-Affirmation-Agentic	0.00	-0.02	0.02	0.03	-0.08	0.13	-0.05	-0.12	0.00	-0.03	-0.07	0.00	0.07	-0.02	0.18
Self-Affirmation-Communal	0.00	-0.02	0.02	-0.11	-0.21	0.02	-0.08	-0.14	-0.01	-0.03	-0.08	0.00	0.00	-0.10	0.10
Self-Affirmation-External	0.00	-0.02	0.02	-0.11	-0.23	0.00	-0.03	-0.09	0.02	-0.02	-0.07	0.00	-0.01	-0.10	0.10

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.51

*Results from A Second Stage Moderated Moderated Mediation Model with **Mental Escapism (ME)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																					
	M_1: BIS				M_2: BAS				M_3: SP				M_4: SE				M_5: Optimism				Y: Mental Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.47	<.001	6.27	6.68	4.77	<.001	4.64	4.91	2.96	<.001	2.62	3.30	4.12	<.001	3.99	4.24	3.80	<.001	3.61	3.99	3.70	<.001	2.48	4.93
X: Narcissism	-1.87	<.001	-2.54	-1.20	3.36	<.001	2.93	3.80	0.62	.029	0.06	1.17	3.15	<.001	2.73	3.57	2.93	<.001	2.31	3.55	-0.15	.80	-1.34	1.03
U_1: survey source									-0.16	.08	-0.34	0.02												
M_1: BIS																					0.26	<.001	0.14	0.37
M_2: BAS																					-0.11	.19	-0.28	0.06
M_3: Self-Protection																					0.26	<.001	0.13	0.40
M_4: Self-Enhancement																					0.04	.65	-0.15	0.24
M_5: Optimism																					-0.11	.10	-0.25	0.02
W: Condition																					-0.58	.51	-2.31	1.14
XW: GN * Condition																					1.02	.21	-0.59	2.64
Z1																					-1.84	.020	-3.39	-0.29
Z2																					-0.53	.53	-2.21	1.15
Int_6:	GN	x	Z1																		0.54	.46	-0.90	1.99
Int_7:	GN	x	Z2																		-1.00	.24	-2.67	0.67
Int_18:	GN	x	W		x	Z1															-0.40	.69	-2.42	1.61
Int_19:	GN	x	W		x	Z2															0.40	.73	-1.85	2.64

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.11	.91	-2.06	1.84
Control-Communal	-1.20	.27	-3.34	0.94
Control-External	0.85	.42	-1.20	2.90
Self-Affirmation-Agentic	0.71	.47	-1.22	2.64
Self-Affirmation-Communal	0.43	.68	-1.60	2.46
Self-Affirmation-External	1.48	.10	-0.29	3.25

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Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.13	-0.25	0.57	-0.20	-1.22	0.80	-0.09	-0.30	0.06	-0.63	-1.80	0.51	-0.54	-1.32	0.20
Z2	0.02	-0.41	0.51	0.79	-0.38	1.92	-0.05	-0.24	0.12	-0.02	-1.42	1.30	-0.37	-1.18	0.46

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.10	-0.43	0.68	0.76	-0.69	2.19	-0.15	-0.44	0.04	-0.77	-2.57	0.90	-0.93	-2.11	0.25
Communal	-0.16	-0.80	0.42	1.16	-0.27	2.61	0.02	-0.21	0.29	0.48	-1.11	2.04	0.15	-0.74	1.08
External	-0.07	-0.64	0.44	-0.23	-1.55	1.15	0.00	-0.20	0.21	-0.11	-1.72	1.60	0.16	-0.81	1.14
by Z1 (Agentic vs Communal Stressor), among:															
Control	-0.09	-0.44	0.21	-0.11	-0.84	0.64	0.02	-0.11	0.16	0.40	-0.49	1.34	0.47	-0.12	1.13
Self-Affirmation	0.04	-0.21	0.30	-0.31	-0.99	0.38	-0.07	-0.20	0.02	-0.22	-0.94	0.47	-0.06	-0.47	0.37
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	0.06	-0.26	0.37	0.11	-0.71	0.95	0.11	-0.01	0.31	-0.39	-1.48	0.76	0.45	-0.20	1.11
Self-Affirmation	0.09	-0.23	0.42	0.90	0.08	1.68	0.07	-0.02	0.22	-0.42	-1.22	0.35	0.08	-0.41	0.59

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.54	-1.06	-0.11	-0.44	-1.52	0.64	0.24	0.02	0.54	0.35	-1.05	1.89	0.37	-0.60	1.35
Control-Communal	-0.35	-0.87	0.12	-0.21	-1.25	0.82	0.20	0.00	0.51	-0.46	-1.58	0.69	-0.58	-1.35	0.12
Control-External	-0.54	-0.96	-0.15	-0.49	-1.49	0.47	0.05	-0.10	0.23	0.53	-0.86	1.87	-0.78	-1.57	-0.07
Self-Affirmation-Agentic	-0.44	-0.87	-0.09	0.32	-0.62	1.33	0.09	-0.02	0.27	-0.42	-1.29	0.39	-0.56	-1.19	0.08
Self-Affirmation-Communal	-0.51	-0.96	-0.14	0.94	-0.05	1.93	0.22	0.02	0.50	0.02	-1.09	1.19	-0.43	-1.01	0.11
Self-Affirmation-External	-0.60	-1.14	-0.17	-0.72	-1.66	0.27	0.05	-0.06	0.19	0.42	-0.51	1.39	-0.61	-1.30	-0.01

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; SP = Self-Protection; SE = Self-Enhancement; O = Optimism; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Appendix A – Tables Chapter 4

Table A4.52

*Results from A Second Stage Moderated Moderated Mediation Model with **Mental Escapism (ME)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: SP				M_4: SE				M_5: Optimism				Y: Mental Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.51	<.001	6.31	6.71	4.81	<.001	4.67	4.94	3.16	<.001	2.82	3.50	4.18	<.001	4.05	4.30	3.87	<.001	3.68	4.06	3.73	<.001	2.52	4.94
AN	-2.31	<.001	-2.86	-1.76	1.40	<.001	1.03	1.77	-0.77	.001	-1.23	-0.30	2.04	<.001	1.68	2.39	2.66	<.001	2.14	3.18	-1.19	.007	-2.06	-0.33
MN	1.24	.001	0.49	2.00	1.84	<.001	1.34	2.35	1.77	<.001	1.14	2.40	0.39	.11	-0.09	0.88	-0.95	.008	-1.65	-0.24	0.76	.06	-0.03	1.56
U_1: survey source									-0.24	.006	-0.42	-0.07												
M_1: BIS																				b_1	0.23	<.001	0.12	0.35
M_2: BAS																				b_2	-0.11	.20	-0.27	0.06
M_3: Self-Protection																				b_3	0.24	<.001	0.10	0.37
M_4: Self-Enhancement																				b_4	0.09	.38	-0.11	0.28
M_5: Optimism																				b_5	-0.08	.22	-0.22	0.05
W: Condition																				c_2'	-0.68	.43	-2.37	1.02
XW: AN * Condition																				c_3'	1.19	.041	0.05	2.33
Z1																				b_{11}	-1.94	.013	-3.46	-0.41
Z2																				b_{12}	-0.49	.56	-2.14	1.16
Int_6:	AN	x	Z1																	b_{13}	0.05	.92	-0.93	1.03
Int_7:	AN	x	Z2																	b_{14}	-0.55	.37	-1.75	0.65
Int_18:	AN	x	W		x	Z1														b_{27}	-0.34	.63	-1.74	1.06
Int_19:	AN	x	W		x	Z2														b_{28}	0.13	.88	-1.48	1.73
	AN																							

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-1.42	.034	-2.73	-0.10
Control-Communal	-1.52	.047	-3.02	-0.02
Control-External	-0.64	.41	-2.17	0.89
Self-Affirmation-Agentic	-0.51	.48	-1.93	0.90
Self-Affirmation-Communal	0.07	.92	-1.39	1.54
Self-Affirmation-External	0.42	.52	-0.86	1.70

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Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.15	-0.33	0.64	-0.11	-0.53	0.30	0.11	-0.07	0.32	-0.40	-1.12	0.32	-0.46	-1.12	0.19
Z2	0.04	-0.49	0.61	0.37	-0.09	0.85	0.05	-0.15	0.25	0.00	-0.88	0.81	-0.36	-1.09	0.40

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.08	-0.57	0.76	0.32	-0.25	0.92	0.17	-0.06	0.46	-0.53	-1.61	0.48	-0.88	-1.87	0.18
Communal	-0.21	-0.93	0.49	0.53	-0.04	1.17	-0.05	-0.35	0.23	0.26	-0.72	1.22	0.05	-0.78	0.89
External	-0.13	-0.82	0.51	-0.13	-0.67	0.43	-0.01	-0.24	0.23	-0.14	-1.14	0.94	0.12	-0.78	0.99
by Z1 (Agentic vs Communal Stressor), among:															
Control	-0.07	-0.47	0.30	0.01	-0.28	0.31	-0.03	-0.19	0.12	0.34	-0.21	0.90	0.40	-0.14	0.94
Self-Affirmation	0.07	-0.23	0.37	-0.09	-0.38	0.19	0.08	-0.02	0.21	-0.06	-0.51	0.38	-0.07	-0.43	0.32
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	0.05	-0.33	0.42	0.01	-0.32	0.35	-0.13	-0.31	0.02	-0.28	-0.95	0.43	0.43	-0.15	1.02
Self-Affirmation	0.10	-0.30	0.50	0.38	0.05	0.73	-0.08	-0.22	0.03	-0.28	-0.81	0.21	0.07	-0.37	0.55

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.59	-1.15	-0.09	-0.13	-0.57	0.29	-0.28	-0.55	-0.07	0.38	-0.47	1.27	0.39	-0.47	1.23
Control-Communal	-0.44	-1.03	0.12	-0.16	-0.58	0.25	-0.22	-0.52	0.00	-0.30	-0.99	0.43	-0.40	-1.09	0.26
Control-External	-0.60	-1.05	-0.15	-0.16	-0.58	0.23	-0.05	-0.26	0.12	0.45	-0.39	1.29	-0.65	-1.37	-0.01
Self-Affirmation-Agentic	-0.51	-0.98	-0.09	0.19	-0.20	0.61	-0.11	-0.29	0.03	-0.16	-0.75	0.39	-0.49	-1.06	0.09
Self-Affirmation-Communal	-0.65	-1.13	-0.22	0.38	-0.03	0.82	-0.27	-0.51	-0.09	-0.05	-0.73	0.66	-0.35	-0.86	0.13
Self-Affirmation-External	-0.72	-1.30	-0.19	-0.29	-0.69	0.11	-0.06	-0.23	0.07	0.32	-0.28	0.96	-0.53	-1.16	0.03

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; SP = Self-Protection; SE = Self-Enhancement; O = Optimism; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.53

*Results from A Second Stage Moderated Moderated Mediation Model with **Mental Escapism (ME)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: SP				M_4: SE				M_5: Optimism				Y: Mental Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.51	<.001	6.31	6.71	4.81	<.001	4.67	4.94	3.16	<.001	2.82	3.50	4.18	<.001	4.05	4.30	3.87	<.001	3.68	4.06	3.75	<.001	2.53	4.96
AN	-2.31	<.001	-2.86	-1.76	1.40	<.001	1.03	1.77	-0.77	.001	-1.23	-0.30	2.04	<.001	1.68	2.39	2.66	<.001	2.14	3.18	-0.56	.08	-1.19	0.06
MN	1.24	.001	0.49	2.00	1.84	<.001	1.34	2.35	1.77	<.001	1.14	2.40	0.39	.11	-0.09	0.88	-0.95	.008	-1.65	-0.24	0.26	.65	-0.85	1.36
U_1: survey source									-0.24	.006	-0.42	-0.07												
M_1: BIS																				b_1	0.24	<.001	0.13	0.35
M_2: BAS																				b_2	-0.11	.22	-0.28	0.06
M_3: Self-Protection																				b_3	0.25	<.001	0.12	0.39
M_4: Self-Enhancement																				b_4	0.06	.52	-0.13	0.25
M_5: Optimism																				b_5	-0.10	.13	-0.24	0.03
W: Condition																				c_2'	-0.60	.49	-2.31	1.11
XW: MN * Condition																				c_3'	0.90	.22	-0.55	2.35
Z1																				b_{11}	-1.94	.013	-3.47	-0.40
Z2																				b_{12}	-0.47	.58	-2.14	1.20
Int_6:	MN	x	Z1																	b_{13}	0.12	.86	-1.19	1.43
Int_7:	MN	x	Z2																	b_{14}	-0.50	.50	-1.96	0.96
Int_18:	MN	x	W		x	Z1														b_{27}	0.31	.73	-1.49	2.12
Int_19:	MN	x	W		x	Z2														b_{28}	-0.03	.97	-2.07	2.00

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	0.12	.89	-1.70	1.95
Control-Communal	-0.11	.91	-2.07	1.85
Control-External	0.76	.40	-1.01	2.53
Self-Affirmation-Agentic	1.32	.13	-0.40	3.04
Self-Affirmation-Communal	0.46	.62	-1.38	2.30
Self-Affirmation-External	1.69	.06	-0.07	3.46

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Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	-0.08	-0.37	0.19	-0.16	-0.76	0.39	-0.26	-0.71	0.15	-0.09	-0.34	0.06	0.18	-0.07	0.48
Z2	-0.02	-0.32	0.30	0.46	-0.20	1.13	-0.13	-0.57	0.33	0.00	-0.20	0.22	0.11	-0.18	0.42

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	-0.08	-0.46	0.31	0.38	-0.41	1.19	-0.45	-1.04	0.08	-0.09	-0.43	0.12	0.30	-0.09	0.79
Communal	0.08	-0.31	0.50	0.71	-0.11	1.58	0.06	-0.57	0.73	0.09	-0.12	0.40	-0.05	-0.39	0.26
External	0.02	-0.34	0.40	-0.14	-0.91	0.64	-0.01	-0.55	0.49	0.00	-0.28	0.24	-0.04	-0.39	0.32
by Z1 (Agentic vs Communal Stressor), among:															
Control	0.05	-0.16	0.27	-0.02	-0.41	0.42	0.07	-0.27	0.42	0.06	-0.05	0.26	-0.15	-0.41	0.05
Self-Affirmation	-0.03	-0.20	0.14	-0.18	-0.56	0.21	-0.19	-0.46	0.05	-0.02	-0.15	0.07	0.02	-0.13	0.17
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	-0.02	-0.24	0.19	0.02	-0.44	0.50	0.32	-0.02	0.71	-0.06	-0.27	0.08	-0.13	-0.40	0.08
Self-Affirmation	-0.04	-0.26	0.18	0.48	0.03	0.96	0.20	-0.05	0.50	-0.06	-0.22	0.05	-0.02	-0.23	0.15

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.34	0.05	0.73	-0.20	-0.79	0.39	0.68	0.24	1.20	0.06	-0.13	0.35	-0.12	-0.48	0.23
Control-Communal	0.24	-0.06	0.62	-0.17	-0.79	0.42	0.53	0.02	1.14	-0.07	-0.29	0.08	0.19	-0.04	0.51
Control-External	0.32	0.06	0.66	-0.22	-0.79	0.33	0.12	-0.27	0.56	0.09	-0.08	0.37	0.23	-0.01	0.59
Self-Affirmation-Agentic	0.26	0.03	0.59	0.18	-0.33	0.75	0.23	-0.09	0.60	-0.03	-0.19	0.08	0.18	-0.03	0.47
Self-Affirmation-Communal	0.32	0.07	0.68	0.54	-0.03	1.12	0.60	0.24	1.07	0.02	-0.13	0.21	0.13	-0.04	0.39
Self-Affirmation-External	0.35	0.05	0.73	-0.36	-0.91	0.19	0.11	-0.19	0.44	0.08	-0.05	0.28	0.19	-0.01	0.51

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; SP = Self-Protection; SE = Self-Enhancement; O = Optimism; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.54

*Results from A Second Stage Moderated Moderated Mediation Model with **Mental Escapism (ME)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: SP				M_4: SE				M_5: Optimism				Y: Mental Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.35	<.001	2.98	3.72	5.66	<.001	5.36	5.97	1.88	<.001	1.43	2.32	5.21	<.001	4.92	5.50	6.53	<.001	6.15	6.90	3.22	<.001	1.97	4.47
X: Narcissism	0.62	<.001	0.54	0.71	0.00	.99	-0.07	0.07	0.29	<.001	0.21	0.36	-0.06	.07	-0.13	0.01	-0.46	<.001	-0.55	-0.38	0.25	.001	0.10	0.41
U_1: survey source									-0.13	.13	-0.30	0.04												
M_1: BIS																					0.19	.001	0.07	0.31
M_2: BAS																					-0.13	.10	-0.29	0.02
M_3: Self-Protection																					0.20	.004	0.06	0.33
M_4: Self-Enhancement																					-0.02	.84	-0.21	0.17
M_5: Optimism																					-0.03	.64	-0.17	0.10
W: Condition																					-0.62	.48	-2.36	1.12
XW: VN * Condition																					-0.10	.37	-0.32	0.12
Z1																					-2.20	.006	-3.77	-0.63
Z2																					-0.72	.41	-2.44	1.00
Int_6:	VN	x	Z1																		0.13	.18	-0.06	0.32
Int_7:	VN	x	Z2																		0.19	.09	-0.03	0.41
Int_18:	VN	x	W		x	Z1															-0.14	.30	-0.42	0.13
Int_19:	VN	x	W		x	Z2															-0.18	.25	-0.49	0.13

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	0.48	<.001	0.22	0.74
Control-Communal	0.22	.13	-0.06	0.50
Control-External	0.06	.64	-0.20	0.33
Self-Affirmation-Agentic	0.14	.30	-0.13	0.42
Self-Affirmation-Communal	0.17	.21	-0.10	0.44
Self-Affirmation-External	0.14	.30	-0.13	0.42

Appendix A – Tables Chapter 4

Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	-0.01	-0.15	0.13	0.00	-0.01	0.01	-0.03	-0.10	0.04	0.01	-0.01	0.05	0.13	0.01	0.25
Z2	0.03	-0.13	0.18	0.00	-0.02	0.03	-0.01	-0.08	0.07	0.00	-0.04	0.03	0.08	-0.05	0.21

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: SP			M_4: SE			M_5: Optimism		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.02	-0.18	0.22	0.00	-0.03	0.03	-0.04	-0.14	0.05	0.01	-0.03	0.05	0.22	0.03	0.41
Communal	0.05	-0.14	0.24	0.00	-0.03	0.03	0.02	-0.09	0.12	-0.02	-0.06	0.01	-0.03	-0.19	0.11
External	0.00	-0.18	0.18	0.00	-0.02	0.02	0.00	-0.09	0.08	0.00	-0.04	0.04	-0.03	-0.18	0.13
by Z1 (Agentic vs Communal Stressor), among:															
Control	0.00	-0.11	0.11	0.00	-0.01	0.01	0.01	-0.05	0.06	-0.01	-0.03	0.01	-0.12	-0.22	-0.02
Self-Affirmation	-0.02	-0.10	0.07	0.00	-0.01	0.01	-0.02	-0.07	0.02	0.00	-0.01	0.02	0.01	-0.05	0.08
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	-0.05	-0.14	0.06	0.00	-0.01	0.01	0.04	-0.02	0.09	0.01	-0.01	0.05	-0.10	-0.20	0.01
Self-Affirmation	-0.02	-0.13	0.09	0.00	-0.02	0.02	0.03	-0.02	0.07	0.01	-0.01	0.04	-0.01	-0.10	0.06

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.09	-0.06	0.25	0.00	-0.02	0.02	0.08	0.01	0.16	0.00	-0.04	0.03	-0.15	-0.31	0.02
Control-Communal	0.10	-0.05	0.25	0.00	-0.01	0.01	0.07	-0.02	0.16	0.01	-0.01	0.05	0.09	-0.02	0.21
Control-External	0.16	0.04	0.27	0.00	-0.01	0.01	0.02	-0.04	0.09	-0.01	-0.05	0.02	0.11	0.00	0.24
Self-Affirmation-Agentic	0.12	0.00	0.24	0.00	-0.02	0.02	0.04	-0.01	0.09	0.01	-0.01	0.03	0.07	-0.02	0.18
Self-Affirmation-Communal	0.15	0.02	0.26	0.00	-0.02	0.02	0.09	0.02	0.15	0.00	-0.03	0.02	0.05	-0.04	0.14
Self-Affirmation-External	0.16	0.02	0.30	0.00	-0.02	0.02	0.02	-0.03	0.08	-0.01	-0.05	0.01	0.08	-0.01	0.19

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; SP = Self-Protection; SE = Self-Enhancement; O = Optimism; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.55

*Results from A Second Stage Moderated Moderated Mediation Model with **Downplaying (D)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																									
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				M_6: O				Y: Downplaying			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.47	<.001	6.27	6.68	4.77	<.001	4.64	4.91	4.39	<.001	4.16	4.62	2.96	<.001	2.62	3.30	4.12	<.001	3.99	4.24	3.80	<.001	3.61	3.99	4.71	<.001	3.38	6.05
X: Narcissism	-1.87	<.001	-2.54	-1.20	3.36	<.001	2.93	3.80	0.16	0.68	-0.60	0.91	0.62	.029	0.06	1.17	3.15	<.001	2.73	3.57	2.93	<.001	2.31	3.55	-1.13	.08	-2.41	0.15
U_1: survey source													-0.16	.08	-0.34	0.02												
M_1: BIS																									-0.42	<.001	-0.54	-0.29
M_2: BAS																									0.15	.11	-0.03	0.33
M_3:Impulsivity																									0.00	.94	-0.13	0.12
M_4: Self-Protection																									0.15	.038	0.01	0.30
M_5: Self-Enhancement																									0.15	.14	-0.05	0.36
M_6: Optimism																									0.00	.97	-0.16	0.15
W: Condition																									-1.64	.09	-3.51	0.23
XW: GN * Condition																									0.50	.57	-1.24	2.24
Z1																									-0.84	.33	-2.53	0.86
Z2																									-0.62	.50	-2.44	1.20
Int_6:	GN	x	Z1																						1.57	.05	0.00	3.14
Int_7:	GN	x	Z2																						0.28	.76	-1.52	2.07
Int_18:	GN	x	W		x	Z1																			-0.79	.47	-2.97	1.38
Int_19:	GN	x	W		x	Z2																			0.61	.62	-1.80	3.03

Conditional Direct Effects of X on Y	effect	p	CI	
Control-Agentic	0.58	.59	-1.52	2.69
Control-Communal	-2.56	.031	-4.89	-0.23
Control-External	-1.41	.21	-3.60	0.78
Self-Affirmation-Agentic	0.59	.58	-1.49	2.67
Self-Affirmation-Communal	-0.96	.39	-3.14	1.21
Self-Affirmation-External	-1.52	.12	-3.42	0.37

Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE			M_6: O		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.19	-0.26	0.71	-0.05	-1.19	1.04	0.01	-0.11	0.15	0.08	-0.09	0.31	-0.06	-1.32	1.22	-0.02	-0.80	0.81
Z2	0.25	-0.26	0.75	-0.93	-2.24	0.42	0.01	-0.09	0.15	-0.07	-0.29	0.10	1.06	-0.39	2.28	-0.78	-1.77	0.21

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE			M_6: O		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	-0.05	-0.61	0.44	-0.55	-2.02	0.91	0.01	-0.13	0.18	0.03	-0.20	0.28	1.14	-0.49	2.67	-0.63	-1.73	0.51
Communal	-0.44	-1.37	0.30	-0.46	-2.06	1.27	-0.01	-0.20	0.16	-0.13	-0.48	0.12	1.27	-0.84	3.17	-0.58	-1.80	0.53
External	-0.62	-1.29	-0.03	0.90	-0.78	2.53	-0.01	-0.19	0.11	0.06	-0.15	0.29	-0.38	-1.89	1.29	0.56	-0.71	1.73
by Z1 (Agentic vs Communal Stressor), among:																		
Control	-0.13	-0.50	0.20	-0.27	-1.01	0.46	0.00	-0.07	0.09	0.06	-0.06	0.22	-0.29	-1.18	0.56	0.16	-0.42	0.75
Self-Affirmation	0.07	-0.25	0.42	-0.32	-1.21	0.50	0.01	-0.08	0.13	0.14	0.00	0.34	-0.36	-1.29	0.57	0.14	-0.38	0.76
by Z2 (Agentic and Communal vs External Stressor), among:																		
Control	-0.12	-0.46	0.25	0.52	-0.45	1.53	-0.02	-0.17	0.09	0.03	-0.11	0.18	-0.50	-1.43	0.56	0.41	-0.36	1.15
Self-Affirmation	0.13	-0.23	0.50	-0.42	-1.24	0.52	-0.01	-0.11	0.07	-0.05	-0.19	0.06	0.56	-0.41	1.43	-0.37	-0.99	0.25

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.59	0.22	1.07	0.50	-0.50	1.48	-0.01	-0.13	0.09	0.16	-0.01	0.43	-0.06	-1.16	1.03	0.36	-0.40	1.18
Control-Communal	0.85	0.25	1.63	1.03	-0.06	2.16	-0.01	-0.17	0.09	0.05	-0.13	0.27	0.53	-0.79	1.88	0.04	-0.79	0.91
Control-External	0.90	0.42	1.45	-0.01	-1.33	1.21	0.02	-0.10	0.17	0.07	-0.08	0.28	0.99	-0.34	2.09	-0.42	-1.32	0.61
Self-Affirmation-Agentic	0.54	0.15	0.98	-0.05	-1.16	1.01	0.00	-0.09	0.10	0.20	0.01	0.45	1.08	-0.10	2.18	-0.27	-1.00	0.63
Self-Affirmation-Communal	0.40	-0.15	0.97	0.58	-0.64	1.96	-0.02	-0.20	0.12	-0.08	-0.33	0.12	1.80	0.25	3.22	-0.54	-1.41	0.22
Self-Affirmation-External	0.28	-0.15	0.74	0.88	-0.23	1.83	0.00	-0.08	0.10	0.13	0.00	0.31	0.61	-0.38	1.66	0.14	-0.60	0.87

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Appendix A – Tables Chapter 4

Table A4.56

*Results from A Second Stage Moderated Moderated Mediation Model with **Downplaying (D)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																											
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				M_6: O				Y: Downplaying			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.51	<.001	6.31	6.71	4.81	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.82	3.50	4.18	<.001	4.05	4.30	3.87	<.001	3.68	4.06	4.82	<.001	3.50	6.13
AN	-2.31	<.001	-2.86	-1.76	1.40	<.001	1.03	1.77	-1.89	<.001	-2.49	-1.29	-0.77	.001	-1.23	-0.30	2.04	<.001	1.68	2.39	2.66	<.001	2.14	3.18	-1.37	.004	-2.29	-0.44
MN	1.24	.001	0.49	2.00	1.84	<.001	1.34	2.35	3.24	<.001	2.41	4.06	1.77	<.001	1.14	2.40	0.39	.11	-0.09	0.88	-0.95	.008	-1.65	-0.24	-0.09	.84	0.84	0.84
U_1: survey source													-0.24	.006	-0.42	-0.07												
M_1: BIS																									-0.44	<.001	-0.57	-0.31
M_2: BAS																									0.16	.09	-0.02	0.34
M_3:Impulsivity																									-0.01	.94	-0.13	0.12
M_4: Self-Protection																									0.14	.06	-0.01	0.28
M_5: Self-Enhancement																									0.19	.07	-0.02	0.39
M_6: Optimism																									0.00	.96	-0.15	0.16
W: Condition																									-1.64	.08	-3.48	0.20
XW: AN * Condition																									1.00	.11	-0.22	2.22
Z1																									-0.98	.25	-2.64	0.68
Z2																									-0.75	.41	-2.54	1.04
Int_6:	AN	x	Z1																						0.87	.10	-0.18	1.92
Int_7:	AN	x	Z2																						-0.02	.98	-1.30	1.27
Int_18:	AN	x	W		x	Z1																			-0.06	.94	-1.56	1.44
Int_19:	AN	x	W		x	Z2																			0.52	.55	-1.20	2.24
	AN																											

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.50	.48	-1.91	0.90
Control-Communal	-2.25	.006	-3.87	-0.63
Control-External	-1.35	.11	-2.98	0.29
Self-Affirmation-Agentic	0.69	.37	-0.82	2.20
Self-Affirmation-Communal	-0.93	.24	-2.50	0.64
Self-Affirmation-External	-0.87	.22	-2.24	0.51

Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE			M_6: O		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.18	-0.38	0.76	-0.09	-0.58	0.37	-0.17	-0.61	0.24	-0.10	-0.34	0.10	-0.16	-0.95	0.65	0.05	-0.67	0.80
Z2	0.31	-0.31	0.91	-0.40	-0.96	0.14	-0.07	-0.51	0.36	0.08	-0.14	0.31	0.71	-0.20	1.53	-0.74	-1.61	0.17

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE			M_6: O		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	-0.18	-0.85	0.42	-0.33	-0.96	0.28	-0.15	-0.71	0.37	-0.05	-0.35	0.22	0.55	-0.50	1.56	-0.54	-1.52	0.48
Communal	-0.54	-1.57	0.38	-0.16	-0.83	0.57	0.18	-0.44	0.83	0.16	-0.16	0.52	0.86	-0.41	2.06	-0.63	-1.72	0.42
External	-0.83	-1.61	-0.09	0.36	-0.29	1.06	0.11	-0.38	0.65	-0.07	-0.33	0.19	-0.35	-1.36	0.71	0.52	-0.63	1.55

by Z1 (Agentic vs Communal Stressor), among:

Control	-0.12	-0.53	0.30	-0.05	-0.37	0.26	-0.01	-0.31	0.29	-0.01	-0.08	-0.26	0.07	-0.10	-0.65	0.43	0.08	-0.44	0.61
Self-Affirmation	0.06	-0.32	0.48	-0.14	-0.52	0.20	-0.17	-0.48	0.09	-0.34	-0.18	-0.38	-0.03	-0.26	-0.86	0.32	0.12	-0.35	0.68

by Z2 (Agentic and Communal vs External Stressor), among:

Control	-0.17	-0.58	0.27	0.23	-0.15	0.65	0.18	-0.13	0.53	-0.02	-0.20	0.15	-0.36	-0.97	0.32	0.43	-0.27	1.08
Self-Affirmation	0.15	-0.30	0.58	-0.17	-0.54	0.21	0.11	-0.17	0.42	0.06	-0.08	0.21	0.34	-0.26	0.93	-0.30	-0.86	0.25

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.81	0.37	1.34	0.29	-0.12	0.72	0.09	-0.30	0.49	-0.20	-0.47	0.02	0.10	-0.61	0.80	0.30	-0.37	1.03
Control-Communal	1.05	0.36	1.81	0.39	-0.07	0.90	0.10	-0.35	0.62	-0.04	-0.27	0.18	0.31	-0.49	1.13	0.15	-0.63	0.97
Control-External	1.18	0.63	1.78	-0.01	-0.53	0.48	-0.17	-0.58	0.18	-0.08	-0.32	0.10	0.75	-0.13	1.49	-0.42	-1.20	0.51
Self-Affirmation-Agentic	0.64	0.16	1.11	-0.04	-0.51	0.42	-0.06	-0.45	0.30	-0.25	-0.50	-0.06	0.65	-0.13	1.36	-0.23	-0.88	0.57
Self-Affirmation-Communal	0.51	-0.18	1.14	0.23	-0.27	0.82	0.28	-0.09	0.73	0.12	-0.13	0.39	1.17	0.18	2.11	-0.48	-1.23	0.22
Self-Affirmation-External	0.35	-0.19	0.90	0.35	-0.10	0.80	-0.06	-0.42	0.28	-0.15	-0.34	0.00	0.39	-0.27	1.04	0.10	-0.58	0.78

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Appendix A – Tables Chapter 4

Table A4.57

*Results from A Second Stage Moderated Moderated Mediation Model with **Downplaying (D)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				M_6: O				Y: Downplaying			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.51	<.001	6.31	6.71	4.81	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.82	3.50	4.18	<.001	4.05	4.30	3.87	<.001	3.68	4.06	4.91	<.001	3.59	6.23
AN	-2.31	<.001	-2.86	-1.76	1.40	<.001	1.03	1.77	-1.89	<.001	-2.49	-1.29	-0.77	.001	-1.23	-0.30	2.04	<.001	1.68	2.39	2.66	<.001	2.14	3.18	-0.82	.017	-1.49	-0.15
MN	1.24	.001	0.49	2.00	1.84	<.001	1.34	2.35	3.24	<.001	2.41	4.06	1.77	<.001	1.14	2.40	0.39	.11	-0.09	0.88	-0.95	.008	-1.65	-0.24	0.11	.86	-1.09	1.30
U_1: survey source													-0.24	.006	-0.42	-0.07												
M_1: BIS																									-0.41	<.001	-0.54	-0.29
M_2: BAS																									0.14	.15	-0.05	0.32
M_3:Impulsivity																									-0.02	.74	-0.15	0.10
M_4: Self-Protection																									0.13	.07	-0.01	0.28
M_5: Self-Enhancement																									0.15	.16	-0.06	0.35
M_6: Optimism																									-0.01	.94	-0.16	0.15
W: Condition																									-1.90	.045	-3.76	-0.04
XW: MN * Condition																									-0.37	.64	-1.95	1.21
Z1																									-1.12	.19	-2.79	0.55
Z2																									-0.46	.62	-2.27	1.35
Int_6:	X	x	Z1																						0.62	.40	-0.81	2.05
Int_7:	X	x	Z2																						1.27	.12	-0.31	2.85
Int_18:	X	x	W		x	Z1																			-0.03	.98	-2.00	1.94
Int_19:	X	x	W		x	Z2																			-0.49	.66	-2.69	1.70

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	1.36	.18	-0.63	3.34
Control-Communal	0.12	.91	-2.02	2.26
Control-External	-1.16	.23	-3.07	0.75
Self-Affirmation-Agentic	0.71	.47	-1.20	2.62
Self-Affirmation-Communal	-0.47	.64	-2.45	1.51
Self-Affirmation-External	-1.04	.28	-2.92	0.84

Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE			M_6: O		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	-0.10	-0.46	0.20	-0.06	-0.69	0.57	0.24	-0.45	0.98	0.24	-0.23	0.73	-0.02	-0.24	0.16	0.02	-0.26	0.32
Z2	-0.20	-0.59	0.13	-0.41	-1.16	0.34	0.23	-0.52	1.01	-0.18	-0.66	0.31	0.15	-0.05	0.44	0.25	-0.07	0.68

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE			M_6: O		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.03	-0.32	0.42	-0.20	-1.02	0.61	0.32	-0.59	1.27	0.14	-0.45	0.74	0.15	-0.07	0.49	0.21	-0.15	0.71
Communal	0.23	-0.24	0.85	-0.09	-1.03	0.85	-0.17	-1.26	0.91	-0.34	-1.10	0.39	0.20	-0.08	0.62	0.18	-0.19	0.64
External	0.43	0.04	0.97	0.47	-0.46	1.38	-0.27	-1.21	0.60	0.17	-0.39	0.70	-0.05	-0.31	0.19	-0.18	-0.66	0.25
by Z1 (Agentic vs Communal Stressor), among:																		
Control	0.05	-0.18	0.29	-0.06	-0.50	0.35	0.02	-0.49	0.57	0.17	-0.15	0.53	-0.01	-0.14	0.12	-0.07	-0.31	0.11
Self-Affirmation	-0.05	-0.30	0.15	-0.12	-0.61	0.33	0.26	-0.16	0.78	0.41	0.07	0.78	-0.03	-0.19	0.10	-0.05	-0.28	0.14
by Z2 (Agentic and Communal vs External Stressor), among:																		
Control	0.11	-0.12	0.38	0.19	-0.35	0.75	-0.43	-1.06	0.12	0.03	-0.35	0.38	-0.07	-0.26	0.07	-0.14	-0.44	0.11
Self-Affirmation	-0.09	-0.35	0.14	-0.22	-0.69	0.30	-0.21	-0.72	0.28	-0.15	-0.48	0.16	0.08	-0.04	0.27	0.11	-0.10	0.37

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.41	-0.82	-0.11	0.29	-0.27	0.85	-0.27	-0.93	0.41	0.42	-0.04	0.93	0.01	-0.14	0.21	-0.13	-0.49	0.10
Control-Communal	-0.52	-1.04	-0.11	0.40	-0.20	1.09	-0.30	-1.19	0.48	0.08	-0.42	0.59	0.03	-0.15	0.26	0.00	-0.28	0.30
Control-External	-0.62	-1.13	-0.20	0.06	-0.66	0.75	0.36	-0.27	1.11	0.21	-0.21	0.69	0.13	-0.06	0.40	0.15	-0.20	0.49
Self-Affirmation-Agentic	-0.38	-0.76	-0.09	0.09	-0.52	0.68	0.05	-0.56	0.72	0.56	0.18	1.00	0.16	-0.04	0.47	0.08	-0.23	0.38
Self-Affirmation-Communal	-0.28	-0.68	0.08	0.32	-0.35	1.10	-0.47	-1.20	0.14	-0.26	-0.82	0.30	0.23	-0.05	0.62	0.18	-0.07	0.52
Self-Affirmation-External	-0.19	-0.52	0.08	0.53	-0.07	1.09	0.10	-0.48	0.69	0.38	0.04	0.75	0.08	-0.05	0.30	-0.04	-0.32	0.23

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.58

*Results from A Second Stage Moderated Moderated Mediation Model with **Downplaying (D)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																									
	M_1: BIS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				M_6: O				Y: Downplaying			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.35	<.001	2.98	3.72	5.66	<.001	5.36	5.97	1.73	<.001	1.32	2.14	1.88	<.001	1.43	2.32	5.21	<.001	4.92	5.50	6.53	<.001	6.15	6.90	5.05	<.001	3.69	6.41
X: Narcissism	0.62	<.001	0.54	0.71	0.00	0.99	-0.07	0.07	0.64	<.001	0.55	0.73	0.29	<.001	0.21	0.36	-0.06	.07	-0.13	0.01	-0.46	<.001	-0.55	-0.38	-0.03	.75	-0.20	0.14
U_1: survey source													-0.13	.13	-0.30	0.04												
M_1: BIS																									-0.40	<.001	-0.52	-0.27
M_2: BAS																									0.09	.33	-0.09	0.26
M_3:Impulsivity																									-0.01	.85	-0.14	0.11
M_4: Self-Protection																									0.16	.040	0.01	0.30
M_5: Self-Enhancement																									0.13	.22	-0.08	0.33
M_6: Optimism																									-0.03	.71	-0.19	0.13
W: Condition																									-2.19	.023	-4.08	-0.30
XW: VN * Condition																									0.15	.23	-0.09	0.40
Z1																									-1.37	.11	-3.08	0.33
Z2																									-0.22	.81	-2.09	1.64
Int_6:	X	x	Z1																						0.07	.52	-0.15	0.29
Int_7:	X	x	Z2																						-0.16	.20	-0.40	0.08
Int_18:	X	x	W		x	Z1																			0.08	.60	-0.22	0.39
Int_19:	X	x	W		x	Z2																			0.27	.12	-0.07	0.62

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.04	.81	-0.33	0.26
Control-Communal	-0.18	.27	-0.49	0.14
Control-External	0.13	.39	-0.16	0.42
Self-Affirmation-Agentic	0.34	.036	0.02	0.65
Self-Affirmation-Communal	0.03	.85	-0.27	0.32
Self-Affirmation-External	0.01	.97	-0.30	0.31

Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE			M_6: O		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	-0.08	-0.25	0.08	0.00	-0.01	0.01	0.02	-0.12	0.17	0.04	-0.05	0.12	0.00	-0.02	0.03	0.00	-0.12	0.13
Z2	-0.14	-0.31	0.03	0.00	-0.02	0.02	0.00	-0.15	0.15	-0.04	-0.12	0.04	-0.02	-0.07	0.01	0.10	-0.06	0.25

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: I			M_4: SP			M_5: SE			M_6: O		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	-0.06	-0.24	0.14	0.00	-0.02	0.02	0.00	-0.19	0.19	0.01	-0.09	0.11	-0.02	-0.07	0.01	0.07	-0.11	0.24
Communal	0.11	-0.14	0.38	0.00	-0.02	0.02	-0.05	-0.27	0.18	-0.06	-0.20	0.07	-0.02	-0.09	0.02	0.06	-0.11	0.24
External	0.23	0.03	0.44	0.00	-0.03	0.03	-0.02	-0.19	0.15	0.03	-0.07	0.11	0.01	-0.03	0.05	-0.09	-0.27	0.12
by Z1 (Agentic vs Communal Stressor), among:																		
Control	0.01	-0.10	0.13	0.00	-0.01	0.01	0.01	-0.09	0.12	0.03	-0.03	0.08	0.00	-0.02	0.02	-0.04	-0.13	0.05
Self-Affirmation	-0.07	-0.19	0.04	0.00	-0.01	0.01	0.03	-0.06	0.13	0.06	0.00	0.12	0.01	-0.01	0.03	-0.03	-0.13	0.05
by Z2 (Agentic and Communal vs External Stressor), among:																		
Control	0.06	-0.06	0.18	0.00	-0.02	0.02	-0.06	-0.18	0.04	0.01	-0.05	0.07	0.01	-0.01	0.04	-0.05	-0.17	0.08
Self-Affirmation	-0.07	-0.20	0.05	0.00	-0.01	0.01	-0.07	-0.17	0.03	-0.02	-0.08	0.03	-0.01	-0.04	0.01	0.05	-0.05	0.15

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.20	-0.34	-0.08	0.00	-0.02	0.02	-0.03	-0.16	0.10	0.08	0.00	0.16	0.00	-0.03	0.02	-0.05	-0.18	0.07
Control-Communal	-0.23	-0.43	-0.04	0.00	-0.02	0.02	-0.05	-0.24	0.11	0.02	-0.06	0.11	-0.01	-0.04	0.02	0.02	-0.10	0.15
Control-External	-0.31	-0.46	-0.17	0.00	-0.02	0.02	0.06	-0.07	0.18	0.03	-0.04	0.11	-0.02	-0.06	0.01	0.07	-0.11	0.21
Self-Affirmation-Agentic	-0.26	-0.40	-0.11	0.00	-0.01	0.02	-0.03	-0.16	0.10	0.08	0.02	0.15	-0.02	-0.06	0.01	0.02	-0.12	0.14
Self-Affirmation-Communal	-0.12	-0.29	0.07	0.00	-0.02	0.02	-0.10	-0.24	0.02	-0.04	-0.13	0.06	-0.03	-0.09	0.01	0.08	-0.03	0.22
Self-Affirmation-External	-0.08	-0.22	0.07	0.00	-0.02	0.02	0.03	-0.08	0.16	0.06	0.00	0.12	-0.01	-0.04	0.01	-0.02	-0.14	0.10

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; O = Optimism; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Appendix A – Tables Chapter 4

Table A4.59

*Results from A Second Stage Moderated Moderated Mediation Model with **Anger/Aggression (A)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: Impulsivity				M_4: SP				M_5: SE				Y: Anger/Aggression			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.47	<.001	6.26	6.67	4.77	<.001	4.64	4.91	4.38	<.001	4.15	4.61	2.97	<.001	2.63	3.30	4.12	<.001	3.99	4.25	1.09	.07	-0.08	2.25
X: Narcissism	-1.84	<.001	-2.51	-1.17	3.37	<.001	2.93	3.80	0.18	.64	-0.57	0.93	0.63	.026	0.08	1.18	3.16	<.001	2.74	3.57	1.07	.09	-0.15	2.30
U_1: survey source													-0.16	.07	-0.34	0.01								
M_1: BIS																					0.13	.031	0.01	0.25
M_2: BAS																					-0.14	.11	-0.32	0.03
M_3: Impulsivity																					0.36	<.001	0.25	0.47
M_4: Self-Protection																					0.22	.002	0.08	0.36
M_5: Self-Enhancement																					-0.11	.26	-0.30	0.08
W: Condition																					-1.02	.24	-2.70	0.67
XW: GN * Condition																					0.46	.59	-1.22	2.14
Z1																					-0.41	.58	-1.87	1.05
Z2																					1.53	.06	-0.08	3.14
Int_6:	X	x	Z1																		-0.19	.81	-1.69	1.32
Int_7:	X	x	Z2																		-0.48	.59	-2.20	1.25
Int_18:	X	x	W		x	Z1															0.60	.58	-1.50	2.69
Int_19:	X	x	W		x	Z2															-0.18	.88	-2.51	2.14

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	0.65	.53	-1.38	2.67
Control-Communal	1.02	.37	-1.20	3.25
Control-External	1.55	.15	-0.55	3.65
Self-Affirmation-Agentic	1.61	.12	-0.40	3.63
Self-Affirmation-Communal	0.79	.46	-1.32	2.91
Self-Affirmation-External	2.20	.019	0.36	4.04

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Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	-0.02	-0.46	0.34	0.51	-0.48	1.54	0.00	-0.09	0.10	-0.07	-0.28	0.10	-0.42	-1.62	*0.75*
Z2	-0.34	-0.83	0.10	0.35	-0.88	1.52	-0.01	-0.13	0.10	-0.02	-0.25	0.19	0.14	-1.16	*1.37*

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	-0.11	-0.70	0.38	1.31	-0.15	2.86	0.00	-0.13	0.16	-0.11	-0.40	0.14	-0.32	-2.16	1.46
Communal	-0.07	-0.62	0.55	0.29	-1.06	1.61	0.00	-0.12	0.14	0.04	-0.20	0.30	0.53	-1.02	2.01
External	0.41	-0.13	1.04	0.28	-1.15	1.82	0.01	-0.10	0.17	0.00	-0.27	0.28	-0.10	-1.56	*1.43*
by Z1 (Agentic vs Communal Stressor), among:															
Control	-0.20	-0.51	0.11	-0.56	-1.32	0.17	0.00	-0.07	0.09	-0.02	-0.17	0.11	0.60	-0.33	1.57
Self-Affirmation	-0.23	-0.54	0.02	-0.05	-0.70	0.65	0.00	-0.06	0.08	-0.09	-0.25	0.01	0.18	-0.53	0.89
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	0.34	0.01	0.72	0.34	-0.53	-1.40	0.45	0.00	-0.07	0.09	0.05	-0.10	0.24	-0.01	-0.98	0.99
Self-Affirmation	0.00	-0.33	0.32	0.00	-0.18	-0.92	0.58	0.00	-0.08	0.08	0.02	-0.11	0.19	0.13	-0.69	0.91

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.28	-0.73	0.17	-1.29	-2.41	-0.23	0.07	-0.26	0.43	0.15	-0.05	0.41	0.25	-1.22	1.83
Control-Communal	0.13	-0.30	0.51	-0.18	-1.15	0.88	0.06	-0.22	0.38	0.18	0.00	0.46	-0.96	-2.08	0.22
Control-External	-0.58	-1.09	-0.17	0.05	-1.16	1.15	0.06	-0.22	0.35	0.09	-0.09	0.32	-0.34	-1.53	0.77
Self-Affirmation-Agentic	-0.39	-0.81	-0.07	0.02	-1.00	1.09	0.07	-0.25	0.43	0.04	-0.10	0.22	-0.07	-1.07	0.82
Self-Affirmation-Communal	0.06	-0.36	0.49	0.11	-0.76	0.95	0.06	-0.21	0.38	0.21	0.01	0.52	-0.43	-1.50	0.59
Self-Affirmation-External	-0.17	-0.58	0.22	0.34	-0.57	1.24	0.07	-0.25	0.42	0.09	-0.07	0.31	-0.44	-1.42	0.54

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Appendix A – Tables Chapter 4

Table A4.60

*Results from A Second Stage Moderated Moderated Mediation Model with **Anger/Aggression (A)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: Impulsivity				M_4: SP				M_5: SE				Y: Anger/Aggression			
	coef	*p*	*CI*		coef	*p*	*CI*		coef	*p*	*CI*		coef	*p*	*CI*		coef	*p*	*CI*		coef	*p*	*CI*	
Constant	6.50	<.001	6.30	6.70	4.80	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	1.15	.05	-0.01	2.30
AN	-2.28	<.001	-2.83	-1.73	1.42	<.001	1.05	1.79	-1.87	<.001	-2.47	-1.27	-0.74	.001	-1.21	-0.28	2.06	<.001	1.70	2.41	-0.05	.91	-0.94	0.84
MN	1.23	.001	0.48	1.98	1.82	<.001	1.31	2.32	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	.13	-0.11	0.86	1.26	.003	0.00	0.00
U_1: survey source													-0.25	.005	-0.43	-0.08								
M_1: BIS																					0.13	.035	0.01	0.25
M_2: BAS																					-0.15	.09	-0.32	0.02
M_3: Impulsivity																					0.35	<.001	0.23	0.46
M_4: Self-Protection																					0.21	.003	0.07	0.34
M_5: Self-Enhancement																					-0.08	.42	-0.27	0.11
W: Condition																					-1.00	.24	-2.66	0.66
XW: AN * Condition																					0.39	.51	-0.79	1.57
Z1																					-0.42	.56	-1.86	1.01
Z2																					1.59	.05	-0.01	3.18
Int_6:	X	x	Z1																		0.06	.91	-0.94	1.06
Int_7:	X	x	Z2																		-0.29	.65	-1.53	0.96
Int_18:	X	x	W		x	Z1															0.22	.76	-1.22	1.67
Int_19:	X	x	W		x	Z2															-0.36	.67	-2.03	1.31

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.14	.84	-1.49	1.22
Control-Communal	-0.25	.75	-1.77	1.27
Control-External	0.24	.77	-1.36	1.83
Self-Affirmation-Agentic	0.30	.69	-1.17	1.77
Self-Affirmation-Communal	-0.26	.74	-1.78	1.27
Self-Affirmation-External	0.99	.15	-0.35	2.33

Appendix A – Tables Chapter 4

Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.00	-0.50	0.44	0.22	-0.19	0.65	-0.01	-0.38	0.37	0.08	-0.10	0.31	-0.21	-1.01	0.53
Z2	-0.41	-0.98	0.13	0.18	-0.33	0.67	0.07	-0.35	0.49	0.03	-0.19	0.30	0.10	-0.74	0.90

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	-0.11	-0.80	0.49	0.58	-0.03	1.26	-0.02	-0.56	0.55	0.13	-0.14	0.47	-0.18	-1.44	0.96
Communal	-0.11	-0.77	0.60	0.14	-0.41	0.69	0.00	-0.48	0.51	-0.04	-0.32	0.23	0.25	-0.71	1.16
External	0.51	-0.18	1.21	0.10	-0.49	0.76	-0.12	-0.60	0.39	-0.01	-0.32	0.28	-0.11	-1.07	0.88
by Z1 (Agentic vs Communal Stressor), among:															
Control	-0.20	-0.51	0.11	-0.56	-1.32	0.17	0.00	-0.07	0.09	-0.02	-0.17	0.11	0.60	-0.33	1.57
Self-Affirmation	-0.23	-0.54	0.02	-0.05	-0.70	0.65	0.00	-0.06	0.08	-0.09	-0.25	0.01	0.18	-0.53	0.89
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	0.34	0.01	0.72	0.34	-0.53	-1.40	0.45	0.00	-0.07	0.09	0.05	-0.10	0.24	-0.01	-0.98	0.99
Self-Affirmation	0.00	-0.33	0.32	0.00	-0.18	-0.92	0.58	0.00	-0.08	0.08	0.02	-0.11	0.19	0.13	-0.69	0.91

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.36	-0.85	0.19	-0.57	-1.06	-0.12	-0.70	-1.30	-0.25	-0.17	-0.46	0.05	0.19	-0.76	1.23
Control-Communal	0.19	-0.30	0.65	-0.09	-0.49	0.33	-0.64	-1.10	-0.25	-0.19	-0.46	-0.01	-0.53	-1.23	0.18
Control-External	-0.71	-1.26	-0.19	0.02	-0.48	0.46	-0.61	-1.06	-0.26	-0.10	-0.35	0.11	-0.15	-0.92	0.57
Self-Affirmation-Agentic	-0.47	-0.89	-0.09	0.02	-0.43	0.46	-0.73	-1.22	-0.34	-0.04	-0.22	0.13	0.02	-0.67	0.60
Self-Affirmation-Communal	0.08	-0.43	0.60	0.05	-0.31	0.40	-0.63	-1.07	-0.28	-0.23	-0.49	-0.04	-0.28	-0.95	0.34
Self-Affirmation-External	-0.20	-0.70	0.28	0.12	-0.27	0.53	-0.73	-1.21	-0.30	-0.10	-0.36	0.08	-0.26	-0.89	0.37

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.61

*Results from A Second Stage Moderated Moderated Mediation Model with **Anger/Aggression (A)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: Impulsivity				M_4: SP				M_5: SE				Y: Anger/Aggression			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.50	<.001	6.30	6.70	4.80	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	1.17	.050	0.00	2.34
AN	-2.28	<.001	-2.83	-1.73	1.42	<.001	1.05	1.79	-1.87	<.001	-2.47	-1.27	-0.74	.001	-1.21	-0.28	2.06	<.001	1.70	2.41	0.18	.59	-0.47	0.82
MN	1.23	.001	0.48	1.98	1.82	<.001	1.31	2.32	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	.13	-0.11	0.86	1.24	.035	0.09	2.40
U_1: survey source													-0.25	.005	-0.43	-0.08								
M_1: BIS																					0.13	.028	0.01	0.25
M_2: BAS																					-0.17	.06	-0.34	0.01
M_3: Impulsivity																					0.35	<.001	0.23	0.46
M_4: Self-Protection																					0.21	.003	0.07	0.35
M_5: Self-Enhancement																					-0.09	.37	-0.28	0.10
W: Condition																					-1.06	.22	-2.74	0.63
XW: MN * Condition																					0.01	.99	-1.52	1.54
Z1																					-0.50	.50	-1.96	0.96
Z2																					1.53	.06	-0.08	3.14
Int_6:	X	x	Z1																		-0.53	.45	-1.91	0.86
Int_7:	X	x	Z2																		-0.54	.49	-2.06	0.99
Int_18:	X	x	W		x	Z1															0.89	.36	-1.01	2.79
Int_19:	X	x	W		x	Z2															0.29	.79	-1.83	2.42

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	0.45	.65	-1.47	2.36
Control-Communal	1.50	.15	-0.57	3.58
Control-External	1.78	.06	-0.06	3.62
Self-Affirmation-Agentic	1.50	.11	-0.35	3.35
Self-Affirmation-Communal	0.77	.43	-1.14	2.67
Self-Affirmation-External	1.50	.11	-0.33	3.33

Appendix A – Tables Chapter 4

Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.01	-0.26	0.29	0.24	-0.30	0.80	-0.06	-0.75	0.63	-0.22	-0.70	0.21	-0.04	-0.24	0.11
Z2	0.24	-0.05	0.61	0.16	-0.49	0.79	-0.13	-0.86	0.60	-0.07	-0.64	0.45	0.01	-0.17	0.21

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.06	-0.28	0.48	0.71	-0.06	1.59	-0.06	-1.09	0.94	-0.32	-1.01	0.31	-0.03	-0.32	0.22
Communal	0.04	-0.34	0.45	0.24	-0.48	0.99	0.05	-0.83	0.95	0.13	-0.47	0.75	0.06	-0.14	0.32
External	-0.30	-0.75	0.05	0.25	-0.52	1.07	0.20	-0.67	1.03	0.01	-0.65	0.71	-0.01	-0.23	0.22
by Z1 (Agentic vs Communal Stressor), among:															
Control	0.13	-0.07	0.36	-0.26	-0.69	0.13	0.11	-0.40	0.66	-0.02	-0.37	0.32	0.07	-0.05	0.26
Self-Affirmation	0.14	-0.02	0.36	-0.02	-0.38	0.35	0.06	-0.36	0.50	-0.24	-0.56	0.03	0.03	-0.07	0.15
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	-0.22	-0.53	-0.01	-0.27	-0.77	0.23	0.11	-0.41	0.62	0.14	-0.25	0.57	-0.01	-0.17	0.13
Self-Affirmation	0.02	-0.21	0.23	-0.12	-0.53	0.29	-0.03	-0.52	0.52	0.06	-0.30	0.43	0.00	-0.11	0.12

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.19	-0.12	0.51	-0.70	-1.35	-0.12	1.29	0.49	2.28	0.41	-0.10	0.98	0.03	-0.17	0.28
Control-Communal	-0.07	-0.37	0.18	-0.18	-0.73	0.39	1.07	0.40	1.84	0.45	0.02	0.98	-0.11	-0.35	0.05
Control-External	0.39	0.08	0.78	-0.03	-0.66	0.57	1.02	0.46	1.69	0.22	-0.28	0.74	-0.02	-0.21	0.14
Self-Affirmation-Agentic	0.25	0.03	0.53	0.02	-0.52	0.59	1.24	0.60	2.03	0.09	-0.28	0.48	0.01	-0.14	0.14
Self-Affirmation-Communal	-0.04	-0.34	0.24	0.06	-0.40	0.53	1.12	0.51	1.86	0.58	0.16	1.09	-0.05	-0.25	0.08
Self-Affirmation-External	0.08	-0.17	0.38	0.22	-0.27	0.73	1.22	0.51	1.97	0.24	-0.20	0.74	-0.03	-0.19	0.10

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.62

*Results from A Second Stage Moderated Moderated Mediation Model with **Anger/Aggression (A)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																					
	M_1: BIS				M_2: BAS				M_3: Impulsivity				M_4: SP				M_5: SE				Y: Anger/Aggression			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.35	<.001	2.98	3.72	5.65	<.001	5.35	5.96	1.73	<.001	1.32	2.14	1.88	<.001	1.44	2.32	5.20	<.001	4.91	5.49	0.63	.29	-0.54	1.80
X: Narcissism	0.62	<.001	0.54	0.71	0.00	.94	-0.07	0.07	0.64	<.001	0.55	0.73	0.29	<.001	0.21	0.36	-0.06	.09	-0.12	0.01	0.23	.004	0.07	0.40
U_1: survey source													-0.14	.11	-0.31	0.03								
M_1: BIS																					0.06	.36	-0.06	0.18
M_2: BAS																					-0.06	.49	-0.22	0.11
M_3: Impulsivity																					0.32	<.001	0.20	0.43
M_4: Self-Protection																					0.19	.009	0.05	0.33
M_5: Self-Enhancement																					-0.10	.28	-0.29	0.08
W: Condition																					-1.19	.16	-2.87	0.48
XW: VN * Condition																					-0.03	.77	-0.27	0.20
Z1																					-0.31	.68	-1.76	1.14
Z2																					1.66	.045	0.04	3.29
Int_6:	X	x	Z1																		0.06	.53	-0.14	0.27
Int_7:	X	x	Z2																		0.01	.92	-0.22	0.24
Int_18:	X	x	W		x	Z1															-0.09	.54	-0.38	0.20
Int_19:	X	x	W		x	Z2															-0.26	.12	-0.59	0.07

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	0.31	.027	0.04	0.57
Control-Communal	0.18	.25	-0.13	0.48
Control-External	0.22	.11	-0.05	0.50
Self-Affirmation-Agentic	0.05	.74	-0.25	0.35
Self-Affirmation-Communal	0.10	.47	-0.18	0.38
Self-Affirmation-External	0.45	.002	0.16	0.73

Appendix A – Tables Chapter 4

Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	CI		Index	CI		Index	CI		Index	CI		Index	CI	
Z1	0.01	-0.12	0.16	0.00	-0.02	0.03	0.02	-0.11	0.15	-0.02	-0.10	0.05	0.01	-0.01	*0.04*
Z2	0.16	0.01	0.32	0.00	-0.02	0.02	0.03	-0.12	0.17	0.00	-0.09	0.09	0.00	-0.03	*0.03*

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.07	-0.13	0.28	0.00	-0.04	0.04	0.05	-0.16	0.24	-0.03	-0.15	0.07	0.00	-0.03	0.05
Communal	0.04	-0.16	0.22	0.00	-0.02	0.01	0.01	-0.17	0.18	0.02	-0.09	0.12	-0.01	-0.05	0.02
External	-0.19	-0.38	0.00	0.00	-0.02	0.02	-0.01	-0.19	0.16	-0.01	-0.11	0.10	-0.01	-0.05	*0.02*
by Z1 (Agentic vs Communal Stressor), among:															
Control	0.06	-0.04	0.15	0.00	-0.02	0.02	-0.01	-0.10	0.10	-0.01	-0.07	0.05	-0.01	-0.04	0.01
Self-Affirmation	0.07	-0.02	0.18	0.00	-0.01	0.01	0.02	-0.07	0.10	-0.03	-0.09	0.02	0.00	-0.02	0.01
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	-0.11	-0.23	0.00	0.00	-0.02	0.02	0.01	-0.10	0.11	0.02	-0.05	0.09	0.00	-0.02	0.02
Self-Affirmation	0.05	-0.07	0.16	0.00	-0.01	0.01	0.03	-0.07	0.14	0.02	-0.04	0.07	0.00	-0.02	0.02

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.04	-0.11	0.17	0.00	-0.03	0.03	0.20	0.06	0.37	0.05	-0.03	0.14	0.00	-0.04	0.03
Control-Communal	-0.08	-0.20	0.04	0.00	-0.01	0.01	0.21	0.08	0.35	0.07	0.00	0.15	0.02	-0.01	0.05
Control-External	0.15	0.01	0.29	0.00	-0.02	0.02	0.19	0.08	0.32	0.04	-0.05	0.11	0.01	-0.02	0.04
Self-Affirmation-Agentic	0.11	-0.04	0.25	0.00	-0.02	0.02	0.26	0.13	0.38	0.02	-0.05	0.08	0.00	-0.02	0.02
Self-Affirmation-Communal	-0.04	-0.19	0.09	0.00	-0.01	0.01	0.22	0.10	0.35	0.09	0.01	0.17	0.00	-0.02	0.03
Self-Affirmation-External	-0.04	-0.17	0.09	0.00	-0.02	0.02	0.19	0.05	0.32	0.02	-0.04	0.10	0.00	-0.02	0.02

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.63

*Results from A Second Stage Moderated Moderated Mediation Model with **Active Escapism (AE)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																							
	M_1: BIS				M_2: BAS				M_3: Impulsivity				M_4: SP				M_5: SE				Y: Active Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.47	<.001	6.26	6.67	4.77	<.001	4.64	4.91	4.38	<.001	4.15	4.61	2.97	<.001	2.63	3.30	4.12	<.001	3.99	4.25	1.32	.06	-0.05	2.69
X: Narcissism	-1.84	<.001	-2.51	-1.17	3.37	<.001	2.93	3.80	0.18	.64	-0.57	0.93	0.63	.026	0.08	1.18	3.16	<.001	2.74	3.57	-0.06	.94	-1.50	1.38
U_1: survey source													-0.16	.07	-0.34	0.01								
M_1: BIS																					-0.09	.23	-0.23	0.05
M_2: BAS																					0.33	.001	0.13	0.54
M_3: Impulsivity																					-0.05	.48	-0.18	0.08
M_4: Self-Protection																					0.23	.005	0.07	0.40
M_5: Self-Enhancement																					0.13	.24	-0.09	0.36
W: Condition																					-0.10	.92	-2.08	1.89
XW: GN * Condition																					0.68	.50	-1.29	2.66
Z1																					0.60	.50	-1.12	2.31
Z2																					0.46	.64	-1.44	2.36
Int_6:	X	x	Z1																		-0.91	.31	-2.68	0.86
Int_7:	X	x	Z2																		-0.45	.66	-2.48	1.58
Int_18:	X	x	W		x	Z1															1.76	.16	-0.70	4.23
Int_19:	X	x	W		x	Z2															0.39	.78	-2.35	3.13

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-1.19	.33	-3.58	1.19
Control-Communal	0.63	.64	-2.00	3.25
Control-External	0.39	.76	-2.08	2.87
Self-Affirmation-Agentic	1.45	.23	-0.92	3.82
Self-Affirmation-Communal	-0.26	.84	-2.75	2.23
Self-Affirmation-External	0.69	.53	-1.48	2.85

Appendix A – Tables Chapter 4

Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.14	-0.35	0.65	-0.04	-1.20	1.16	0.01	-0.10	0.15	0.12	-0.05	0.39	0.11	-1.20	1.36
Z2	-0.40	-1.07	0.14	-0.78	-2.25	0.61	-0.01	-0.16	0.12	-0.08	-0.36	0.12	0.22	-1.18	1.65

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	-0.02	-0.71	0.63	-0.24	-2.03	1.41	0.01	-0.13	0.20	0.01	-0.24	0.31	0.18	-1.57	1.92
Communal	-0.31	-1.08	0.42	-0.17	-1.90	1.37	-0.01	-0.21	0.16	-0.22	-0.65	0.03	-0.03	-1.88	1.83
External	0.43	-0.24	1.24	0.96	-0.81	2.76	0.01	-0.14	0.23	0.02	-0.25	0.30	-0.27	-1.92	1.42
by Z1 (Agentic vs Communal Stressor), among:															
Control	0.12	-0.25	0.53	0.05	-0.74	0.82	0.00	-0.07	0.10	-0.01	-0.17	0.14	-0.07	-0.99	0.90
Self-Affirmation	0.27	-0.04	0.61	0.01	-0.85	0.90	0.02	-0.07	0.14	0.11	-0.01	0.32	0.04	-0.85	0.91
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	0.17	-0.26	0.63	0.86	-0.16	2.01	0.00	-0.12	0.09	-0.05	-0.25	0.12	-0.45	-1.53	0.64
Self-Affirmation	-0.23	-0.67	0.13	0.09	-0.83	1.02	-0.01	-0.14	0.08	-0.14	-0.34	0.00	-0.23	-1.11	0.68

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.37	-0.13	0.93	1.60	0.49	2.66	-0.01	-0.13	0.10	0.11	-0.06	0.37	0.13	-1.17	1.54
Control-Communal	0.12	-0.45	0.70	1.51	0.39	2.77	-0.01	-0.19	0.11	0.13	-0.06	0.41	0.27	-1.08	1.61
Control-External	-0.01	-0.56	0.54	0.26	-1.22	1.63	0.00	-0.14	0.12	0.20	-0.01	0.51	0.88	-0.48	2.18
Self-Affirmation-Agentic	0.34	-0.09	0.79	1.35	-0.06	2.66	0.01	-0.09	0.13	0.13	-0.03	0.38	0.31	-0.80	1.45
Self-Affirmation-Communal	-0.19	-0.70	0.28	1.33	0.14	2.41	-0.03	-0.21	0.11	-0.10	-0.36	0.08	0.23	-1.05	1.61
Self-Affirmation-External	0.42	-0.02	0.99	1.22	0.09	2.24	0.01	-0.09	0.16	0.22	0.02	0.49	0.61	-0.42	1.65

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.64

*Results from A Second Stage Moderated Moderated Mediation Model with **Active Escapism (AE)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																					
	M_1: BIS				M_2: BAS				M_3: Impulsivity				M_4: SP				M_5: SE				Y: Active Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.50	<.001	6.30	6.70	4.80	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	1.23	.08	-0.13	2.59
AN	-2.28	<.001	-2.83	-1.73	1.42	<.001	1.05	1.79	-1.87	<.001	-2.47	-1.27	-0.74	<.001	-1.21	-0.28	2.06	<.001	1.70	2.41	-0.28	.60	-1.32	0.77
MN	1.23	.001	0.48	1.98	1.82	<.001	1.31	2.32	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	.13	-0.11	0.86	-0.52	.30	0.30	0.30
U_1: survey source													-0.25	.005	-0.43	-0.08								
M_1: BIS																					-0.10	.16	-0.24	0.04
M_2: BAS																					0.38	<.001	0.18	0.58
M_3: Impulsivity																					-0.04	.54	-0.17	0.09
M_4: Self-Protection																					0.24	.005	0.07	0.40
M_5: Self-Enhancement																					0.15	.20	-0.08	0.38
W: Condition																					-0.25	.80	-2.20	1.71
XW: AN * Condition																					1.45	.041	0.06	2.83
Z1																					0.75	.38	-0.94	2.45
Z2																					0.47	.62	-1.40	2.35
Int_6:	X	x	Z1																		-0.13	.83	-1.31	1.05
Int_7:	X	x	Z2																		0.28	.71	-1.19	1.74
Int_18:	X	x	W		x	Z1															-0.18	.84	-1.88	1.52
Int_19:	X	x	W		x	Z2															-0.39	.70	-2.36	1.58

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.26	.74	-1.86	1.33
Control-Communal	-0.01	.99	-1.80	1.78
Control-External	-0.55	.56	-2.43	1.32
Self-Affirmation-Agentic	0.81	.36	-0.92	2.54
Self-Affirmation-Communal	1.42	.12	-0.38	3.21
Self-Affirmation-External	1.28	.11	-0.29	2.86

Appendix A – Tables Chapter 4

Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.26	-0.33	0.88	0.11	-0.37	0.61	-0.19	-0.66	0.26	-0.13	-0.42	0.06	0.25	-0.57	1.06
Z2	-0.46	-1.23	0.23	-0.23	-0.88	0.33	0.08	-0.45	0.64	0.10	-0.15	0.37	0.19	-0.71	1.15

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	-0.02	-0.84	0.77	0.02	-0.71	0.72	-0.22	-0.85	0.39	-0.03	-0.36	0.27	0.20	-0.93	1.39
Communal	-0.54	-1.48	0.32	-0.19	-0.93	0.45	0.16	-0.52	0.86	0.24	-0.05	0.66	-0.30	-1.44	0.84
External	0.41	-0.46	1.35	0.25	-0.46	1.07	-0.16	-0.82	0.49	-0.03	-0.34	0.28	-0.33	-1.47	0.73
by Z1 (Agentic vs Communal Stressor), among:															
Control	0.10	-0.35	0.57	-0.04	-0.37	0.29	-0.01	-0.35	0.33	0.02	-0.14	0.19	-0.12	-0.72	0.49
Self-Affirmation	0.36	-0.02	0.77	0.07	-0.28	0.45	-0.20	-0.51	0.10	-0.12	-0.31	0.02	0.13	-0.40	0.69
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	0.18	-0.36	0.73	0.30	-0.12	0.83	0.04	-0.35	0.47	0.06	-0.13	0.28	-0.33	-1.04	0.35
Self-Affirmation	-0.28	-0.80	0.16	0.07	-0.30	0.45	0.12	-0.20	0.50	0.16	0.01	0.36	-0.14	-0.71	0.46

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.42	-0.19	1.07	0.65	0.18	1.16	0.09	-0.36	0.55	-0.13	-0.38	0.08	0.03	-0.84	0.90
Control-Communal	0.22	-0.46	0.92	0.72	0.25	1.29	0.11	-0.42	0.65	-0.16	-0.46	0.06	0.26	-0.58	1.11
Control-External	0.05	-0.61	0.73	0.24	-0.42	0.80	0.04	-0.50	0.52	-0.24	-0.58	0.00	0.63	-0.21	1.50
Self-Affirmation-Agentic	0.41	-0.14	0.93	0.67	0.13	1.25	-0.13	-0.56	0.30	-0.16	-0.42	0.04	0.22	-0.50	1.00
Self-Affirmation-Communal	-0.32	-0.93	0.23	0.53	0.02	1.02	0.26	-0.16	0.72	0.08	-0.13	0.35	-0.04	-0.82	0.76
Self-Affirmation-External	0.46	-0.10	1.09	0.49	0.03	0.96	-0.12	-0.58	0.27	-0.27	-0.53	-0.07	0.30	-0.41	1.00

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.65

*Results from A Second Stage Moderated Moderated Mediation Model with **Active Escapism (AE)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																					
	M_1: BIS				M_2: BAS				M_3: Impulsivity				M_4: SP				M_5: SE				Y: Active Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	6.50	<.001	6.30	6.70	4.80	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	1.27	.07	-0.11	2.64
AN	-2.28	<.001	-2.83	-1.73	1.42	<.001	1.05	1.79	-1.87	<.001	-2.47	-1.27	-0.74	<.001	-1.21	-0.28	2.06	<.001	1.70	2.41	0.46	.24	-0.30	1.22
MN	1.23	.001	0.48	1.98	1.82	<.001	1.31	2.32	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	.13	-0.11	0.86	-0.58	.41	-1.94	0.78
U_1: survey source													-0.25	.005	-0.43	-0.08								
M_1: BIS																					-0.08	.26	-0.22	0.06
M_2: BAS																					0.33	.001	0.13	0.54
M_3: Impulsivity																					-0.04	.60	-0.17	0.10
M_4: Self-Protection																					0.24	.004	0.08	0.40
M_5: Self-Enhancement																					0.11	.33	-0.11	0.33
W: Condition																					-0.19	.85	-2.18	1.79
XW: MN * Condition																					0.16	.86	-1.63	1.96
Z1																					0.60	.50	-1.13	2.32
Z2																					0.49	.61	-1.41	2.39
Int_6:	X	x	Z1																		-1.06	.20	-2.69	0.57
Int_7:	X	x	Z2																		-0.41	.65	-2.21	1.38
Int_18:	X	x	W		x	Z1															2.22	.05	-0.01	4.46
Int_19:	X	x	W		x	Z2															0.67	.60	-1.83	3.17

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-1.84	.11	-4.10	0.41
Control-Communal	0.28	.82	-2.16	2.72
Control-External	-0.16	.88	-2.33	2.00
Self-Affirmation-Agentic	0.88	.43	-1.30	3.05
Self-Affirmation-Communal	-1.45	.20	-3.69	0.79
Self-Affirmation-External	-0.67	.54	-2.83	1.48

Appendix A – Tables Chapter 4

Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	-0.09	-0.49	0.22	-0.03	-0.67	0.61	0.14	-0.67	0.91	0.28	-0.19	0.87	0.02	-0.17	0.21
Z2	0.26	-0.08	0.79	-0.43	-1.22	0.30	-0.14	-1.10	0.80	-0.24	-0.83	0.32	0.03	-0.15	0.26

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.00	-0.44	0.48	-0.11	-1.08	0.76	0.15	-0.94	1.18	0.00	-0.66	0.72	0.05	-0.20	0.33
Communal	0.19	-0.26	0.84	-0.05	-1.00	0.82	-0.13	-1.32	1.08	-0.56	-1.44	0.14	0.01	-0.25	0.29
External	-0.30	-0.91	0.14	0.56	-0.37	1.54	0.21	-0.93	1.36	0.08	-0.61	0.77	-0.02	-0.28	0.22
by Z1 (Agentic vs Communal Stressor), among:															
Control	-0.08	-0.35	0.17	0.03	-0.43	0.47	0.11	-0.46	0.74	-0.01	-0.40	0.35	-0.02	-0.16	0.12
Self-Affirmation	-0.17	-0.49	0.03	0.00	-0.47	0.47	0.25	-0.27	0.79	0.28	-0.06	0.68	0.00	-0.14	0.13
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	-0.12	-0.46	0.17	0.45	-0.10	1.07	-0.07	-0.83	0.62	-0.14	-0.61	0.30	-0.05	-0.24	0.08
Self-Affirmation	0.15	-0.08	0.49	0.02	-0.48	0.51	-0.21	-0.86	0.37	-0.39	-0.77	-0.03	-0.02	-0.17	0.10

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.24	-0.67	0.08	0.86	0.26	1.52	-0.04	-0.80	0.77	0.34	-0.16	0.86	0.00	-0.19	0.22
Control-Communal	-0.08	-0.50	0.30	0.80	0.17	1.58	-0.26	-1.23	0.66	0.35	-0.17	0.97	0.03	-0.14	0.23
Control-External	0.02	-0.36	0.40	0.16	-0.61	0.89	-0.04	-0.86	0.91	0.56	0.00	1.21	0.10	-0.07	0.35
Self-Affirmation-Agentic	-0.23	-0.59	0.05	0.75	0.03	1.47	0.11	-0.66	0.84	0.34	-0.11	0.87	0.04	-0.11	0.24
Self-Affirmation-Communal	0.12	-0.18	0.55	0.75	0.10	1.41	-0.40	-1.17	0.35	-0.21	-0.78	0.29	0.04	-0.14	0.27
Self-Affirmation-External	-0.28	-0.71	0.01	0.72	0.11	1.34	0.17	-0.51	0.96	0.65	0.21	1.11	0.07	-0.06	0.28

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.66

*Results from A Second Stage Moderated Moderated Mediation Model with **Active Escapism (AE)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																					
	M_1: BIS				M_2: BAS				M_3: Impulsivity				M_4: SP				M_5: SE				Y: Active Escapism			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	3.35	<.001	2.98	3.72	5.65	<.001	5.35	5.96	1.73	<.001	1.32	2.14	1.88	<.001	1.44	2.32	5.20	<.001	4.91	5.49	1.49	.034	0.11	2.88
X: Narcissism	0.62	<.001	0.54	0.71	0.00	.94	-0.07	0.07	0.64	<.001	0.55	0.73	0.29	<.001	0.21	0.36	-0.06	.09	-0.12	0.01	-0.15	.14	-0.34	0.05
U_1: survey source													-0.14	.11	-0.31	0.03								
M_1: BIS																					-0.05	.47	-0.20	0.09
M_2: BAS																					0.32	.001	0.12	0.51
M_3: Impulsivity																					-0.01	.85	-0.15	0.12
M_4: Self-Protection																					0.26	.002	0.10	0.43
M_5: Self-Enhancement																					0.15	.18	-0.07	0.37
W: Condition																					-0.61	.55	-2.60	1.37
XW: VN * Condition																					0.24	.08	-0.03	0.52
Z1																					0.64	.47	-1.08	2.36
Z2																					0.67	.49	-1.25	2.60
Int_6:	X	x	Z1																		-0.01	.93	-0.25	0.23
Int_7:	X	x	Z2																		-0.14	.29	-0.41	0.12
Int_18:	X	x	W		x	Z1															0.13	.47	-0.22	0.47
Int_19:	X	x	W		x	Z2															0.03	.89	-0.36	0.41

Conditional Direct Effects of X on Y

	effect	*p*	*CI*	
Control-Agentic	-0.23	.16	-0.55	0.09
Control-Communal	-0.21	.25	-0.57	0.15
Control-External	0.00	.99	-0.33	0.32
Self-Affirmation-Agentic	0.15	.40	-0.20	0.51
Self-Affirmation-Communal	-0.08	.65	-0.40	0.25
Self-Affirmation-External	0.21	.22	-0.13	0.55

Appendix A – Tables Chapter 4

Indices of moderated moderated mediation

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	-0.10	-0.27	0.08	0.00	-0.02	0.02	0.04	-0.12	0.21	0.05	-0.03	0.15	-0.01	-0.04	0.02
Z2	0.13	-0.06	0.34	0.00	-0.02	0.02	-0.03	-0.23	0.15	-0.04	-0.14	0.05	0.00	-0.04	0.03

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: BIS			M_2: BAS			M_3: Impulsivity			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	-0.09	-0.32	0.16	0.00	-0.02	0.02	0.01	-0.20	0.23	-0.01	-0.11	0.11	-0.01	-0.05	0.03
Communal	0.10	-0.14	0.36	0.00	-0.02	0.02	-0.07	-0.32	0.18	-0.11	-0.25	0.01	0.01	-0.03	0.05
External	-0.19	-0.45	0.04	0.00	-0.03	0.03	0.02	-0.20	0.26	0.00	-0.11	0.11	0.00	-0.04	0.04
by Z1 (Agentic vs Communal Stressor), among:															
Control	-0.02	-0.15	0.10	0.00	-0.01	0.01	0.01	-0.11	0.13	-0.01	-0.07	0.05	0.00	-0.01	0.03
Self-Affirmation	-0.12	-0.24	0.00	0.00	-0.01	0.01	0.05	-0.06	0.16	0.05	-0.01	0.11	0.00	-0.02	0.01
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	-0.03	-0.18	0.11	0.00	-0.02	0.02	0.00	-0.14	0.15	-0.02	-0.09	0.06	0.01	-0.01	0.04
Self-Affirmation	0.10	-0.03	0.25	0.00	-0.01	0.01	-0.03	-0.16	0.09	-0.06	-0.12	0.00	0.01	-0.01	0.03

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.07	-0.26	0.10	0.00	-0.04	0.03	0.01	-0.15	0.15	0.06	-0.02	0.14	0.00	-0.03	0.03
Control-Communal	-0.03	-0.20	0.16	0.00	-0.04	0.04	-0.02	-0.21	0.17	0.07	-0.01	0.17	-0.01	-0.05	0.02
Control-External	0.00	-0.17	0.19	0.00	-0.02	0.02	-0.01	-0.18	0.17	0.09	0.00	0.19	-0.02	-0.06	0.01
Self-Affirmation-Agentic	-0.16	-0.33	0.01	0.00	-0.04	0.04	0.02	-0.13	0.17	0.05	-0.02	0.13	-0.01	-0.04	0.01
Self-Affirmation-Communal	0.07	-0.08	0.26	0.00	-0.03	0.04	-0.09	-0.24	0.07	-0.04	-0.13	0.05	0.00	-0.03	0.02
Self-Affirmation-External	-0.19	-0.37	-0.02	0.00	-0.03	0.03	0.01	-0.12	0.17	0.09	0.02	0.16	-0.01	-0.05	0.01

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); BIS=Behavioural Inhibition System; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Appendix A – Tables Chapter 4

Table A4.67

*Results from A Second Stage Moderated Moderated Mediation Model with **Considering Perspective (CP)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

		Outcome variable															
		M_1: Impulsivity				M2: Self-Protection				M3: Self-Enhancement				Y: Considering Perspective			
		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant		4.38	<.001	4.15	4.61	2.97	<.001	2.63	3.30	4.12	<.001	3.99	4.25	4.18	<.001	3.34	5.03
X: Narcissism	a_1	0.18	.64	-0.57	0.93	0.63	.03	0.08	1.18	3.16	<.001	2.74	3.57	-0.81	.11	-1.79	0.18
U_1: survey source						-0.16	.07	-0.34	0.01								
M_1: Impulsivity														-0.04	.39	-0.12	0.05
M2: Self-Protection														-0.17	.009	-0.29	-0.04
M3: Self-Enhancement														0.34	<.001	0.18	0.50
W: Condition														-1.01	.08	-2.16	0.14
XW: GN * Condition														-0.11	.87	-1.48	1.26
Z1														-1.18	.029	-2.24	-0.12
Z2														0.49	.41	-0.67	1.66
Int_5	:	X	x	Z1										-0.31	.62	-1.52	0.90
Int_6	:	X	x	Z2										0.54	.44	-0.84	1.92
Int_15	:	X	x	W		x	Z1							0.63	.47	-1.08	2.34
Int_16	:	X	x	W		x	Z2							-1.39	.15	-3.29	0.50

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.84	.32	-2.50	0.82
Control-Communal	-0.23	.80	-1.99	1.54
Control-External	-1.35	.11	-3.03	0.33
Self-Affirmation-Agentic	-1.02	.21	-2.63	0.59
Self-Affirmation-Communal	-1.67	.07	-3.46	0.12
Self-Affirmation-External	-0.07	.93	-1.61	1.47

Appendix A – Tables Chapter 4

	M_1: Impulsivity			M2: Self-Protection			M3: Self-Enhancement		
Indices of moderated moderated mediation	effect	*CI*		effect	*CI*		effect	*CI*	
Z1	-0.01	-0.09	0.07	0.12	-0.02	0.32	-1.00	-1.92	-0.08
Z2	0.01	-0.08	0.12	-0.03	-0.21	0.16	0.68	-0.46	1.89

Conditional Moderated Mediation	M_1: Impulsivity			M2: Self-Protection			M3: Self-Enhancement		
by condition, among:	effect	*CI*		effect	*CI*		effect	*CI*	
Agentic	-0.01	-0.13	0.10	0.13	-0.06	0.42	0.11	-1.22	1.44
Communal	0.01	-0.10	0.12	-0.11	-0.36	0.09	2.12	0.81	3.41
External	-0.01	-0.17	0.10	0.06	-0.16	0.29	0.09	-1.46	1.48
by Z1, among:									
Control	0.01	-0.05	0.08	0.02	-0.10	0.14	0.47	-0.28	1.20
Self-Affirmation	0.00	-0.06	0.07	0.14	0.01	0.30	-0.53	-1.09	0.02
by Z2, among:									
Control	-0.02	-0.14	0.08	0.03	-0.13	0.17	-0.12	-1.08	0.78
Self-Affirmation	-0.01	-0.10	0.06	0.00	-0.11	0.11	0.57	-0.08	1.22

Conditional Indirect Effects of X on Y	effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.01	-0.09	0.06	-0.07	-0.28	0.07	1.49	0.36	2.58
Control-Communal	-0.02	-0.17	0.10	-0.11	-0.33	0.03	0.54	-0.42	1.55
Control-External	0.01	-0.09	0.14	-0.13	-0.35	0.04	1.19	0.03	2.51
Self-Affirmation-Agentic	-0.01	-0.14	0.07	0.06	-0.08	0.22	1.60	0.80	2.40
Self-Affirmation-Communal	-0.02	-0.16	0.08	-0.22	-0.46	-0.02	2.66	1.76	3.56
Self-Affirmation-External	0.00	-0.07	0.06	-0.08	-0.24	0.04	1.28	0.44	2.13

Note: CI = Bootstrap Confidence Interval (10,000 bootstrap samples); Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Appendix A – Tables Chapter 4

Table A4.68

*Results from A Second Stage Moderated Moderated Mediation Model with **Considering Perspective (CP)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

		Outcome variable															
		M_1: Impulsivity				M2: Self-Protection				M3: Self-Enhancement				Y: Considering Perspective			
		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant		4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	4.12	<.001	3.29	4.95
AN	a_1	-1.87	<.001	-2.47	-1.27	-0.74	.001	-1.21	-0.28	2.06	<.001	1.70	2.41	0.06	.88	-0.69	0.81
MN		3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	.13	-0.11	0.86	-1.15	.008	0.00	0.00
U_1: survey source						-0.25	.005	-0.43	-0.08								
M_1: Impulsivity														-0.02	.71	-0.10	0.07
M2: Self-Protection														-0.15	.016	-0.27	-0.03
M3: Self-Enhancement														0.33	<.001	0.17	0.48
W: Condition														-0.85	.14	-1.99	0.28
XW: AN * Condition														0.38	.45	-0.60	1.36
Z1														-1.11	.037	-2.14	-0.07
Z2														0.42	.47	-0.73	1.57
Int_5	:	X	x	Z1										-0.03	.95	-0.86	0.81
Int_6	:	X	x	Z2										0.03	.95	-0.98	1.05
Int_15	:	X	x	W		x	Z1							0.59	.34	-0.62	1.80
Int_16	:	X	x	W		x	Z2							-0.01	.99	-1.39	1.38

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	0.05	.93	-1.09	1.19
Control-Communal	0.10	.88	-1.17	1.38
Control-External	0.02	.97	-1.28	1.33
Self-Affirmation-Agentic	1.02	.10	-0.19	2.23
Self-Affirmation-Communal	-0.12	.86	-1.43	1.20
Self-Affirmation-External	0.41	.48	-0.72	1.53

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	M_1: Impulsivity			M2: Self-Protection			M3: Self-Enhancement		
Indices of moderated moderated mediation	effect	*CI*		effect	*CI*		effect	*CI*	
Z1	0.06	-0.25	0.38	-0.15	-0.38	0.01	-0.71	-1.31	-0.12
Z2	-0.07	-0.44	0.30	0.04	-0.15	0.27	0.24	-0.47	1.00

	M_1: Impulsivity			M2: Self-Protection			M3: Self-Enhancement		
Conditional Moderated Mediation									
by condition, among:	effect	*CI*		effect	*CI*		effect	*CI*	
Agentic	0.09	-0.34	0.54	-0.16	-0.47	0.06	-0.21	-1.09	0.68
Communal	-0.02	-0.47	0.42	0.14	-0.09	0.42	1.21	0.43	2.01
External	0.14	-0.32	0.60	-0.07	-0.36	0.16	0.14	-0.86	1.02
by Z1, among:									
Control	-0.08	-0.30	0.11	-0.01	-0.15	0.12	0.26	-0.21	0.72
Self-Affirmation	-0.03	-0.27	0.21	-0.16	-0.33	-0.04	-0.45	-0.82	-0.08
by Z2, among:									
Control	0.18	-0.10	0.47	-0.04	-0.21	0.12	0.00	-0.63	0.56
Self-Affirmation	0.11	-0.12	0.35	0.00	-0.12	0.13	0.24	-0.17	0.65

Conditional Indirect Effects of X on Y	effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.04	-0.25	0.31	0.08	-0.09	0.31	0.93	0.21	1.66
Control-Communal	0.20	-0.08	0.52	0.11	-0.07	0.32	0.41	-0.18	1.02
Control-External	-0.15	-0.53	0.23	0.15	-0.04	0.41	0.67	-0.06	1.53
Self-Affirmation-Agentic	0.13	-0.21	0.46	-0.08	-0.26	0.07	0.73	0.17	1.28
Self-Affirmation-Communal	0.18	-0.15	0.53	0.24	0.06	0.49	1.62	1.06	2.18
Self-Affirmation-External	-0.01	-0.28	0.24	0.08	-0.06	0.24	0.81	0.27	1.36

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Appendix A – Tables Chapter 4

Table A4.69

*Results from A Second Stage Moderated Moderated Mediation Model with **Considering Perspective (CP)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

		Outcome variable															
		M_1: Impulsivity				M2: Self-Protection				M3: Self-Enhancement				Y: Considering Perspective			
		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant		4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	4.19	<.001	3.35	5.03
AN	a_1	-1.87	<.001	-2.47	-1.27	-0.74	.001	-1.21	-0.28	2.06	<.001	1.70	2.41	0.23	.42	-0.33	0.78
MN		3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	.13	-0.11	0.86	-1.09	.03	-2.05	-0.13
U_1: survey source						-0.25	.005	-0.43	-0.08								
M_1: Impulsivity														-0.02	.69	-0.11	0.07
M2: Self-Protection														-0.16	.013	-0.28	-0.03
M3: Self-Enhancement														0.30	<.001	0.15	0.46
W: Condition														-1.04	.07	-2.18	0.10
XW: MN * Condition														-0.02	.98	-1.28	1.25
Z1														-1.24	.021	-2.29	-0.19
Z2														0.53	.37	-0.63	1.68
Int_5	:	X	x	Z1										-0.70	.22	-1.83	0.43
Int_6	:	X	x	Z2										0.88	.16	-0.36	2.13
Int_15	:	X	x	W		x	Z1							0.94	.24	-0.64	2.52
Int_16	:	X	x	W		x	Z2							-1.55	.08	-3.31	0.21

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-1.35	.10	-2.97	0.27
Control-Communal	0.05	.95	-1.61	1.72
Control-External	-1.98	.010	-3.48	-0.47
Self-Affirmation-Agentic	-1.20	.13	-2.74	0.33
Self-Affirmation-Communal	-1.68	.046	-3.32	-0.03
Self-Affirmation-External	-0.44	.57	-1.99	1.11

Appendix A – Tables Chapter 4

	M_1: Impulsivity			M2: Self-Protection			M3: Self-Enhancement		
Indices of moderated moderated mediation	effect	*CI*		effect	*CI*		effect	*CI*	
Z1	-0.15	-0.71	0.42	0.30	-0.07	0.72	-0.12	-0.35	0.03
Z2	0.22	-0.43	0.90	-0.05	-0.51	0.41	0.07	-0.06	0.28

Conditional Moderated Mediation	M_1: Impulsivity			M2: Self-Protection			M3: Self-Enhancement		
by condition, among:	effect	*CI*		effect	*CI*		effect	*CI*	
Agentic	-0.14	-0.96	0.67	0.36	-0.15	0.95	0.00	-0.19	0.20
Communal	0.17	-0.62	0.94	-0.23	-0.79	0.31	0.25	-0.06	0.64
External	-0.32	-1.15	0.50	0.14	-0.42	0.72	0.02	-0.17	0.23
by Z1, among:									
Control	0.20	*-0.15*	0.58	0.07	-0.23	0.35	0.06	-0.04	0.20
Self-Affirmation	0.05	*-0.36*	0.48	0.37	0.11	0.65	-0.06	-0.20	0.02
by Z2, among:									
Control	-0.38	*-0.92*	0.14	0.06	-0.31	0.41	-0.01	-0.14	0.12
Self-Affirmation	-0.16	*-0.56*	0.25	0.01	-0.27	0.29	0.06	-0.02	0.20

Conditional Indirect Effects of X on Y	effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.05	-0.55	0.49	-0.18	-0.64	0.20	0.17	-0.04	0.46
Control-Communal	-0.45	-1.01	0.05	-0.31	-0.76	0.08	0.05	-0.06	0.23
Control-External	0.33	-0.37	1.01	-0.34	-0.82	0.13	0.12	-0.04	0.38
Self-Affirmation-Agentic	-0.19	-0.79	0.43	0.19	-0.18	0.54	0.17	-0.04	0.42
Self-Affirmation-Communal	-0.29	-0.89	0.29	-0.54	-0.96	-0.17	0.30	-0.08	0.71
Self-Affirmation-External	0.01	-0.43	0.44	-0.20	-0.55	0.13	0.15	-0.04	0.38

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Appendix A – Tables Chapter 4

Table A4.70

*Results from A Second Stage Moderated Moderated Mediation Model with **Considering Perspective (CP)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

		Outcome variable															
		M_1: Impulsivity				M2: Self-Protection				M3: Self-Enhancement				Y: Considering Perspective			
		coeff.	p	*CI*		coeff.	p	*CI*		coeff.	p	*CI*		coeff.	p	*CI*	
Constant		1.73	<.001	1.32	2.14	1.88	<.001	1.44	2.32	5.20	<.001	4.91	5.49	4.28	<.001	3.40	5.17
X: Narcissism	a_1	0.64	<.001	0.55	0.73	0.29	<.001	0.21	0.36	-0.06	.09	-0.12	0.01	-0.04	.58	-0.18	0.10
U_1: survey source						-0.14	.11	-0.31	0.03								
M_1: Impulsivity														-0.03	.57	-0.12	0.07
M2: Self-Protection														-0.15	.021	-0.27	-0.02
M3: Self-Enhancement														0.29	<.001	0.15	0.43
W: Condition														-1.03	.11	-2.28	0.22
XW: VN * Condition														0.07	.48	-0.12	0.26
Z1														-1.27	.021	-2.36	-0.19
Z2														1.12	.08	-0.13	2.37
Int_5	:	X	x	Z1										0.05	.59	-0.12	0.22
Int_6	:	X	x	Z2										-0.24	.012	-0.43	-0.05
Int_15	:	X	x	W		x	Z1							-0.03	.83	-0.26	0.21
Int_16	:	X	x	W		x	Z2							0.37	.007	0.10	0.64

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	-0.11	.33	-0.34	0.12
Control-Communal	-0.21	.11	-0.46	0.05
Control-External	0.20	.08	-0.02	0.43
Self-Affirmation-Agentic	0.11	.32	-0.11	0.34
Self-Affirmation-Communal	0.07	.55	-0.17	0.31
Self-Affirmation-External	-0.09	.43	-0.33	0.14

Appendix A – Tables Chapter 4

	M_1: Impulsivity			M2: Self-Protection			M3: Self-Enhancement		
Indices of moderated moderated mediation	effect	*CI*		effect	*CI*		effect	*CI*	
Z1	-0.04	-0.15	0.08	0.06	-0.01	0.13	0.01	-0.01	0.05
Z2	-0.05	-0.18	0.08	-0.03	-0.11	0.05	-0.01	-0.04	0.01

Conditional Moderated Mediation	M_1: Impulsivity			M2: Self-Protection			M3: Self-Enhancement		
by condition, among:	effect	*CI*		effect	*CI*		effect	*CI*	
Agentic	-0.09	-0.25	0.07	0.05	-0.04	0.14	0.00	-0.04	0.03
Communal	-0.02	-0.17	0.13	-0.06	-0.16	0.02	-0.03	-0.08	0.01
External	0.01	-0.15	0.17	0.03	-0.06	0.13	-0.01	-0.04	0.02
by Z1, among:									
Control	0.03	-0.05	0.10	0.01	-0.04	0.05	-0.01	-0.03	0.01
Self-Affirmation	-0.01	-0.09	0.08	0.06	0.02	0.11	0.01	0.00	0.02
by Z2, among:									
Control	-0.02	-0.12	0.08	0.02	-0.04	0.08	0.00	-0.02	0.02
Self-Affirmation	-0.07	-0.15	0.02	-0.01	-0.05	0.04	-0.01	-0.03	0.00

Conditional Indirect Effects of X on Y	effect	*CI*		*effect*	CI		effect	*CI*	
Control-Agentic	0.00	-0.12	0.11	-0.02	-0.10	0.04	-0.02	-0.07	0.01
Control-Communal	-0.06	-0.16	0.04	-0.04	-0.11	0.03	-0.01	-0.04	0.01
Control-External	0.00	-0.13	0.13	-0.06	-0.14	0.01	-0.02	-0.06	0.01
Self-Affirmation-Agentic	-0.09	-0.21	0.03	0.02	-0.03	0.08	-0.03	-0.07	0.01
Self-Affirmation-Communal	-0.08	-0.20	0.03	-0.10	-0.17	-0.04	-0.04	-0.10	0.01
Self-Affirmation-External	0.02	-0.08	0.12	-0.03	-0.08	0.03	-0.02	-0.06	0.01

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.71

*Results from a Second Stage Moderated Moderated Mediation Model with **Looking for (spiritual) Help (LfH)** as Outcome Variable, and **Grandiose Narcissism (GN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																							
	M_1: PASS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: Looking for (Spiritual) Help			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.99	<.001	4.60	5.38	4.77	<.001	4.64	4.91	4.38	<.001	4.15	4.61	2.97	<.001	2.63	3.30	4.12	<.001	3.99	4.25	2.03	.004	0.67	3.39
X: Narcissism	1.36	<.001	0.72	2.01	3.37	<.001	2.93	3.80	0.18	0.64	-0.57	0.93	0.63	.03	0.08	1.18	3.16	<.001	2.74	3.57	1.13	.10	-0.23	2.48
U_1: survey source	0.55	<.001	0.34	0.75									-0.16	.07	-0.34	0.01					-0.91	<.001	-1.16	-0.66
M_1: PASS																					0.07	.34	-0.07	0.20
M_2: BAS																					-0.09	.37	-0.30	0.11
M_3: Impulsivity																					-0.06	.34	-0.17	0.06
M_4: Self-Protection																					0.16	.05	0.00	0.32
M_5: Self-Enhancement																					0.35	.003	0.12	0.57
W: Condition																					-1.25	.20	-3.16	0.66
XW: GN * Condition																					-1.63	.09	-3.52	0.26
Z1																					0.28	.75	-1.43	1.98
Z2																					0.68	.45	-1.08	2.43
Int_6:	X	x	Z1																		0.83	.32	-0.82	2.48
Int_7:	X	x	Z2																		0.70	.48	-1.23	2.63
Int_18:	X	x	W		x	Z1															-0.88	.46	-3.21	1.46
Int_19:	X	x	W		x	Z2															-1.13	.40	-3.75	1.50

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	2.31	.042	0.08	4.53
Control-Communal	0.65	.60	-1.79	3.08
Control-External	0.43	.72	-1.95	2.81
Self-Affirmation-Agentic	-0.76	.52	-3.06	1.53
Self-Affirmation-Communal	-0.67	.58	-3.06	1.72
Self-Affirmation-External	-0.07	.95	-2.17	2.03

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Indices of moderated moderated mediation

	M_1: PASS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.14	-0.17	0.47	-0.09	-1.32	1.12	0.00	-0.11	0.10	0.25	0.02	0.58	-0.08	-1.42	1.28
Z2	0.37	0.01	0.89	-0.02	-1.40	1.38	0.02	-0.11	0.20	0.17	-0.04	0.52	0.20	-1.27	1.71

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: PASS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.29	-0.11	0.80	0.45	-1.21	2.04	0.03	-0.12	0.26	0.29	0.02	0.69	0.62	-1.19	2.47
Communal	0.00	-0.42	0.50	0.63	-1.23	2.43	0.03	-0.14	0.26	-0.21	-0.62	0.07	0.77	-1.28	2.81
External	-0.41	-1.03	0.05	0.57	-1.17	2.26	0.00	-0.16	0.16	-0.21	-0.64	0.05	0.39	-1.45	2.14
by Z1 (Agentic vs Communal Stressor), among:															
Control	-0.04	-0.27	0.19	0.20	-0.59	1.07	-0.01	-0.09	0.06	-0.04	-0.21	0.11	-0.04	-0.07	-0.97	0.80
Self-Affirmation	0.10	-0.12	0.34	0.11	-0.72	1.04	-0.01	-0.09	0.06	0.21	0.03	0.46	0.21	-0.14	-1.18	0.86
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	-0.02	-0.28	0.22	0.31	-0.74	1.35	-0.01	-0.13	0.08	-0.02	-0.22	0.14	-0.02	-0.94	-2.06	0.21
Self-Affirmation	0.35	0.05	0.77	0.30	-0.62	1.21	0.01	-0.07	0.12	0.15	-0.01	0.40	0.15	-0.74	-1.68	0.29

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.04	-0.29	0.37	0.04	-0.93	1.19	-0.02	-0.19	0.09	0.05	-0.16	0.27	0.56	-0.84	*2.01*
Control-Communal	0.12	-0.22	0.46	-0.36	-1.67	0.87	-0.01	-0.13	0.09	0.13	-0.09	0.41	0.69	-0.28	*1.87*
Control-External	0.11	-0.17	0.44	-0.63	-1.94	0.78	0.00	-0.12	0.11	0.12	-0.06	0.40	2.04	0.55	*3.49*
Self-Affirmation-Agentic	0.33	0.04	0.72	0.50	-0.70	1.75	0.01	-0.08	0.12	0.34	0.05	0.69	1.17	0.08	*2.32*
Self-Affirmation-Communal	0.13	-0.17	0.50	0.27	-1.13	1.45	0.02	-0.09	0.18	-0.08	-0.34	0.10	1.46	-0.25	3.27
Self-Affirmation-External	-0.30	-0.79	0.08	-0.06	-1.09	0.94	0.00	-0.11	0.11	-0.10	-0.37	0.10	2.43	1.31	*3.49*

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.72

*Results from A Second Stage Moderated Moderated Mediation Model with **Looking for (spiritual) Help (LfH)** as Outcome Variable, and **Adaptive Narcissism (AN)** as Predictor Variable (Whilst Controlling for Maladaptive Narcissism [MN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																							
	M_1: PASS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: Looking for (Spiritual) Help			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.93	<.001	4.53	5.32	4.80	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	1.59	.020	0.25	2.93
AN	1.38	<.001	0.83	1.92	1.42	<.001	1.05	1.79	-1.87	<.001	-2.47	-1.27	-0.74	.002	-1.21	-0.28	2.06	<.001	1.70	2.41	0.83	.10	-0.17	1.82
MN	-0.69	0.07	-1.43	0.04	1.82	<.001	1.31	2.32	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	.13	-0.11	0.86	-0.90	.07	-1.86	0.06
U_1: survey source	0.61	<.001	0.40	0.82									-0.25	.005	-0.43	-0.08					-0.83	<.001	-1.09	-0.58
M_1: PASS																					0.06	.39	-0.08	0.20
M_2: BAS																					-0.04	.72	-0.24	0.16
M_3: Impulsivity																					-0.03	.58	-0.15	0.08
M_4: Self-Protection																					0.18	.029	0.02	0.34
M_5: Self-Enhancement																					0.37	.001	0.14	0.59
W: Condition																					-0.96	.31	-2.83	0.90
XW: AN * Condition																					0.01	.99	-1.31	1.33
Z1																					0.24	.78	-1.41	1.89
Z2																					0.55	.53	-1.16	2.27
Int_6:	X	x	Z1																		0.15	.79	-0.96	1.26
Int_7:	X	x	Z2																		0.61	.39	-0.77	1.98
Int_18:	X	x	W		x	Z1															-1.07	.19	-2.69	0.55
Int_19:	X	x	W		x	Z2															-0.79	.41	-2.65	1.08

Conditional Direct Effects of X on Y	effect	*p*	*CI*	
Control-Agentic	1.28	0.10	-0.24	2.80
Control-Communal	0.98	0.25	-0.71	2.67
Control-External	0.22	0.81	-1.54	1.99
Self-Affirmation-Agentic	-0.18	0.84	-1.87	1.52
Self-Affirmation-Communal	1.66	0.06	-0.06	3.38
Self-Affirmation-External	1.01	0.19	-0.49	2.52

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Indices of moderated moderated mediation

	M_1: PASS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	0.14	-0.18	0.47	-0.02	-0.53	0.50	0.04	-0.33	0.47	-0.28	-0.61	-0.06	0.01	-0.85	0.88
Z2	0.40	0.03	0.86	0.03	-0.57	0.62	-0.18	-0.68	0.31	-0.20	-0.56	0.04	0.07	-0.87	1.08

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: PASS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	0.31	-0.10	0.82	0.13	-0.56	0.82	-0.23	-0.77	0.37	-0.34	-0.75	-0.06	0.26	-0.95	1.51
Communal	0.02	-0.40	0.52	0.17	-0.62	0.92	-0.31	-0.91	0.22	0.23	-0.08	0.65	0.24	-0.93	1.44
External	-0.43	-0.98	0.04	0.11	-0.64	0.86	-0.01	-0.62	0.63	0.24	-0.06	0.70	0.14	-1.09	1.30
by Z1 (Agentic vs Communal Stressor), among:															
Control	-0.06	-0.29	0.18	0.10	-0.23	0.47	0.04	-0.27	0.32	0.05	-0.12	0.25	0.02	-0.57	0.59
Self-Affirmation	0.08	-0.13	0.32	0.08	-0.26	0.48	0.08	-0.18	0.37	-0.23	-0.46	-0.07	0.03	-0.61	0.64
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	-0.03	-0.29	0.22	0.11	-0.36	0.55	0.08	-0.28	0.44	0.01	-0.18	0.23	-0.56	-1.33	0.19
Self-Affirmation	0.37	0.08	0.74	0.14	-0.26	0.51	-0.10	-0.43	0.24	-0.19	-0.44	-0.01	-0.49	-1.10	0.15

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	0.01	-0.33	0.33	0.10	-0.33	0.59	0.14	-0.33	0.54	-0.08	-0.33	0.16	0.49	-0.45	1.45
Control-Communal	0.13	-0.23	0.46	-0.10	-0.65	0.40	0.06	-0.35	0.46	-0.18	-0.49	0.07	0.45	-0.15	1.16
Control-External	0.11	-0.18	0.43	-0.16	-0.73	0.46	-0.02	-0.50	0.42	-0.14	-0.45	0.07	1.31	0.34	2.33
Self-Affirmation-Agentic	0.32	0.03	0.71	0.23	-0.25	0.77	-0.09	-0.49	0.29	-0.41	-0.74	-0.15	0.75	0.00	1.52
Self-Affirmation-Communal	0.15	-0.13	0.50	0.07	-0.54	0.55	-0.25	-0.68	0.10	0.05	-0.15	0.30	0.69	-0.27	1.78
Self-Affirmation-External	-0.32	-0.76	0.06	-0.05	-0.47	0.38	-0.02	-0.48	0.38	0.10	-0.12	0.40	1.46	0.70	2.24

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.73

*Results from A Second Stage Moderated Moderated Mediation Model with **Looking for (spiritual) Help (LfH)** as Outcome Variable, and **Maladaptive Narcissism (MN)** as Predictor Variable (Whilst Controlling for Adaptive Narcissism [AN]), with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																					
	M_1: PASS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: Looking for (Spiritual) Help			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	4.93	<.001	4.53	5.32	4.80	<.001	4.67	4.94	4.40	<.001	4.18	4.62	3.16	<.001	2.83	3.50	4.18	<.001	4.05	4.30	1.91	.006	0.55	3.26
AN	1.38	<.001	0.83	1.92	1.42	<.001	1.05	1.79	-1.87	<.001	-2.47	-1.27	-0.74	.002	-1.21	-0.28	2.06	<.001	1.70	2.41	0.84	.025	0.11	1.58
MN	-0.69	.07	-1.43	0.04	1.82	<.001	1.31	2.32	3.24	<.001	2.42	4.07	1.75	<.001	1.12	2.38	0.37	.13	-0.11	0.86	0.33	.63	-0.99	1.65
U_1: survey source	0.61	<.001	0.40	0.82									-0.25	.005	-0.43	-0.08					-0.88	<.001	-1.13	-0.62
M_1: PASS																					0.07	.32	-0.07	0.21
M_2: BAS																					-0.10	.32	-0.30	0.10
M_3: Impulsivity																					-0.05	.43	-0.16	0.07
M_4: Self-Protection																					0.17	.038	0.01	0.33
M_5: Self-Enhancement																					0.34	.002	0.12	0.57
W: Condition																					-1.29	.18	-3.17	0.60
XW: MN * Condition																					-2.41	.007	-4.13	-0.68
Z1																					0.31	.72	-1.38	2.00
Z2																					0.56	.53	-1.18	2.30
Int_6:	X	x	Z1																		0.71	.37	-0.83	2.25
Int_7:	X	x	Z2																		0.18	.84	-1.54	1.90
Int_18:	X	x	W		x	Z1															-0.23	.83	-2.37	1.90
Int_19:	X	x	W		x	Z2															-0.02	.99	-2.42	2.39

Conditional Direct Effects of X on Y

	effect	*p*	*CI*	
Control-Agentic	1.12	.30	-1.01	3.26
Control-Communal	-0.29	.81	-2.62	2.04
Control-External	0.15	.89	-1.95	2.25
Self-Affirmation-Agentic	-1.52	.15	-3.62	0.57
Self-Affirmation-Communal	-2.47	.025	-4.62	-0.32
Self-Affirmation-External	-2.24	.036	-4.34	-0.14

Appendix A – Tables Chapter 4

Indices of moderated moderated mediation

	M_1: PASS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	-0.09	-0.34	0.07	-0.08	-0.77	0.57	0.00	-0.72	0.67	0.67	0.17	1.27	-0.04	-0.26	0.13
Z2	-0.21	-0.60	0.04	-0.14	-0.90	0.60	0.41	-0.41	1.28	0.46	-0.11	1.19	0.01	-0.20	0.23

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: PASS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	-0.17	-0.56	0.06	0.18	-0.71	1.02	0.60	-0.40	1.63	0.81	0.19	1.57	0.02	-0.23	0.31
Communal	0.02	-0.26	0.29	0.35	-0.66	1.34	0.59	-0.31	1.59	-0.52	-1.39	0.23	0.11	-0.13	0.46
External	0.24	-0.05	0.70	0.48	-0.44	1.42	-0.02	-1.09	1.02	-0.55	-1.44	0.16	0.05	-0.19	0.34
by Z1 (Agentic vs Communal Stressor), among:															
Control	0.03	-0.11	0.18	0.11	-0.34	0.59	-0.12	-0.62	0.42	-0.11	-0.53	0.27	0.00	-0.13	0.13
Self-Affirmation	-0.07	-0.24	0.04	0.03	-0.43	0.52	-0.11	-0.57	0.35	0.55	0.24	0.95	-0.04	-0.21	0.08
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	0.02	-0.12	0.19	0.23	-0.33	0.83	-0.20	-0.83	0.41	-0.03	-0.52	0.37	-0.10	-0.33	0.05
Self-Affirmation	-0.19	-0.50	0.03	0.09	-0.38	0.56	0.21	-0.35	0.77	0.43	0.01	0.92	-0.09	-0.28	0.04

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.01	-0.20	0.19	0.04	-0.52	0.69	-0.37	-1.10	0.42	0.17	-0.38	0.69	0.08	-0.09	0.35
Control-Communal	-0.07	-0.29	0.12	-0.18	-0.86	0.51	-0.14	-0.83	0.57	0.39	-0.22	1.05	0.08	-0.05	0.31
Control-External	-0.07	-0.30	0.08	-0.41	-1.19	0.34	0.04	-0.71	0.87	0.33	-0.17	0.94	0.23	-0.06	0.62
Self-Affirmation-Agentic	-0.18	-0.49	0.03	0.22	-0.39	0.88	0.23	-0.42	0.96	0.98	0.52	1.50	0.10	-0.05	0.35
Self-Affirmation-Communal	-0.05	-0.27	0.11	0.17	-0.57	0.85	0.45	-0.14	1.14	-0.13	-0.68	0.35	0.19	-0.06	0.57
Self-Affirmation-External	0.17	-0.05	0.51	0.06	-0.46	0.59	0.02	-0.64	0.80	-0.22	-0.83	0.31	0.28	-0.08	0.66

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Table A4.74

*Results from A Second Stage Moderated Moderated Mediation Model with **Looking for (spiritual) Help (LfH)** as Outcome Variable, and **Vulnerable Narcissism (VN)** as Predictor Variable, with Condition (Self-Affirmation or Control), and Stressor (Agentic. Communal. or External) as Moderators.*

	Outcome variable																					
	M_1: PASS				M_2: BAS				M_3: I				M_4: SP				M_5: SE				Y: Looking for (Spiritual) Help			
	coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*		coeff.	*p*	*CI*	
Constant	7.09	<.001	6.58	7.61	5.65	<.001	5.35	5.96	1.73	<.001	1.32	2.14	1.88	<.001	1.44	2.32	5.20	<.001	4.91	5.49	1.69	.022	0.25	3.13
X: Narcissism	-0.37	<.001	-0.46	-0.29	0.00	.94	-0.07	0.07	0.64	<.001	0.55	0.73	0.29	<.001	0.21	0.36	-0.06	.09	-0.12	0.01	0.00	.96	-0.18	0.19
U_1: survey source	0.45	<.001	0.25	0.64									-0.14	.11	-0.31	0.03					-0.90	<.001	-1.15	-0.64
M_1: PASS																					0.07	.36	-0.07	0.20
M_2: BAS																					-0.05	.64	-0.24	0.15
M_3: Impulsivity																					-0.05	.42	-0.18	0.08
M_4: Self-Protection																					0.16	.048	0.00	0.32
M_5: Self-Enhancement																					0.41	<.001	0.19	0.63
W: Condition																					-0.36	.73	-2.43	1.71
XW: VN * Condition																					-0.12	.38	-0.37	0.14
Z1																					-0.06	.95	-1.82	1.71
Z2																					0.81	.40	-1.09	2.71
Int_6:	X	x	Z1																		0.05	.68	-0.18	0.28
Int_7:	X	x	Z2																		-0.10	.43	-0.35	0.15
Int_18:	X	x	W		x	Z1															-0.12	.45	-0.44	0.19
Int_19:	X	x	W		x	Z2															0.01	.98	-0.35	0.36

Conditional Direct Effects of X on Y

	effect	*p*	*CI*	
Control-Agentic	0.00	.99	-0.31	0.31
Control-Communal	-0.09	.58	-0.43	0.24
Control-External	0.11	.49	-0.19	0.41
Self-Affirmation-Agentic	-0.24	.13	-0.54	0.07
Self-Affirmation-Communal	-0.08	.61	-0.41	0.24
Self-Affirmation-External	-0.02	.92	-0.33	0.29

Appendix A – Tables Chapter 4

Indices of moderated moderated mediation

	M_1: PASS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Z1	-0.03	-0.11	0.06	0.00	-0.02	0.02	0.01	-0.14	0.16	0.12	0.04	0.22	0.00	-0.02	0.04
Z2	-0.10	-0.21	0.00	0.00	-0.02	0.02	0.07	-0.10	0.26	0.08	-0.02	0.19	0.00	-0.03	0.04

Indices of conditional Moderated Mediation

by condition (SA vs Control), among:

	M_1: PASS			M_2: BAS			M_3: I			M_4: SP			M_5: SE		
	Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*		Index	*CI*	
Agentic	-0.06	-0.19	0.07	0.00	-0.02	0.02	0.12	-0.10	0.37	0.14	0.04	0.27	0.00	-0.04	0.05
Communal	0.00	-0.13	0.11	0.00	-0.02	0.03	0.10	-0.08	0.30	-0.10	-0.24	0.03	-0.01	-0.05	0.03
External	0.12	-0.01	0.26	0.00	-0.03	0.02	0.00	-0.22	0.22	-0.09	-0.23	0.03	-0.01	-0.06	0.03
by Z1 (Agentic vs Communal Stressor), among:															
Control	0.01	-0.05	0.08	0.00	-0.01	0.01	-0.02	-0.15	0.09	-0.02	-0.10	0.04	0.00	-0.02	0.02
Self-Affirmation	-0.02	-0.07	0.04	0.00	-0.01	0.01	-0.01	-0.11	0.08	0.10	0.04	0.16	0.00	-0.02	0.03
by Z2 (Agentic and Communal vs External Stressor), among:															
Control	0.01	-0.05	0.09	0.00	-0.02	0.01	-0.01	-0.15	0.12	0.00	-0.09	0.06	0.01	-0.01	0.05
Self-Affirmation	-0.09	-0.17	-0.01	0.00	-0.01	0.01	0.06	-0.06	0.18	0.07	0.00	0.15	0.02	0.00	0.05

Conditional Indirect Effects of X on Y

	effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*		effect	*CI*	
Control-Agentic	-0.01	-0.10	0.09	0.00	-0.02	0.02	-0.07	-0.27	0.11	0.02	-0.07	0.10	-0.02	-0.07	0.01
Control-Communal	-0.03	-0.12	0.06	0.00	-0.02	0.02	-0.02	-0.15	0.12	0.07	-0.03	0.17	-0.02	-0.05	0.01
Control-External	-0.04	-0.13	0.04	0.00	-0.02	0.02	-0.02	-0.18	0.15	0.05	-0.03	0.15	-0.04	-0.10	0.01
Self-Affirmation-Agentic	-0.07	-0.15	0.02	0.00	-0.02	0.01	0.06	-0.08	0.20	0.16	0.09	0.25	-0.02	-0.06	0.01
Self-Affirmation-Communal	-0.03	-0.12	0.05	0.00	-0.02	0.02	0.08	-0.04	0.22	-0.03	-0.12	0.05	-0.02	-0.08	0.01
Self-Affirmation-External	0.08	-0.03	0.19	0.00	-0.01	0.01	-0.02	-0.16	0.14	-0.04	-0.13	0.05	-0.05	-0.11	0.01

Note: CI = 95% Percentile Bootstrap Confidence Interval (10,000 bootstrap samples); PASS = Perceived Availability of Social Support; BAS = Behavioural Approach System; I = Impulsivity; SP = Self-Protection; SE = Self-Enhancement; Z1 = Agentic vs Communal Stressor; Z2 = Agentic and Communal vs External Stressors

Appendix B Figures

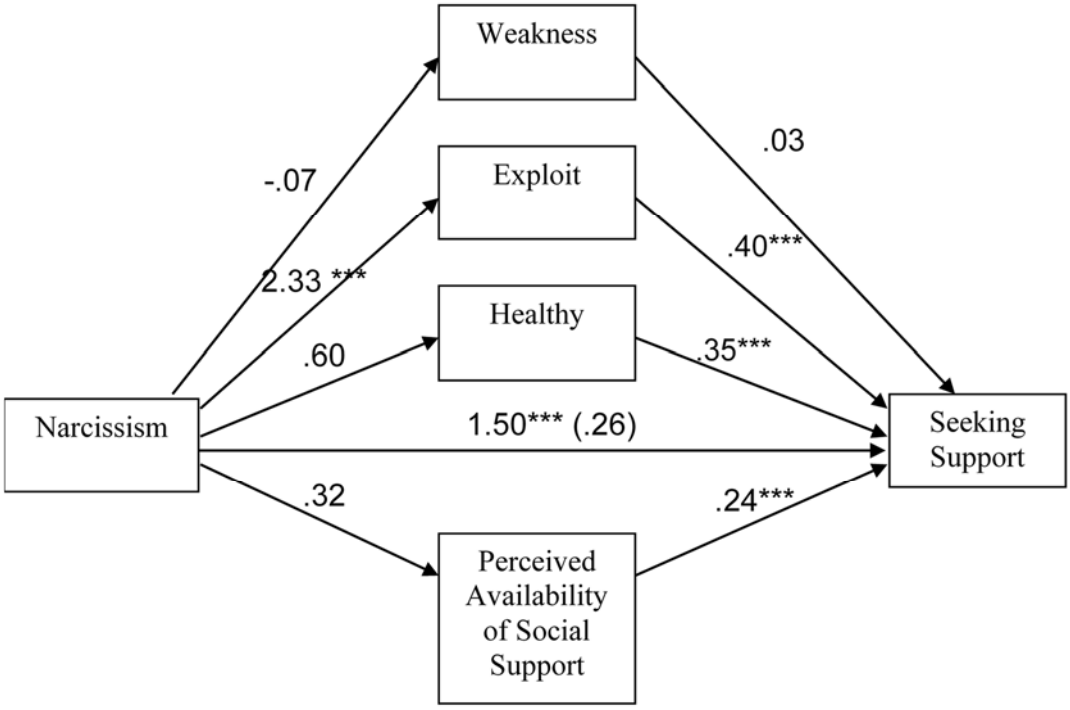


Figure B2.1 Path models of the relations between narcissism, the four mediators, and seeking support in Study 1. The path coefficients are unstandardized regression coefficients. The value in parentheses is the direct effect (*c'*) of narcissism on seeking support. **p* < .05, ***p* < .01, ****p* < .001

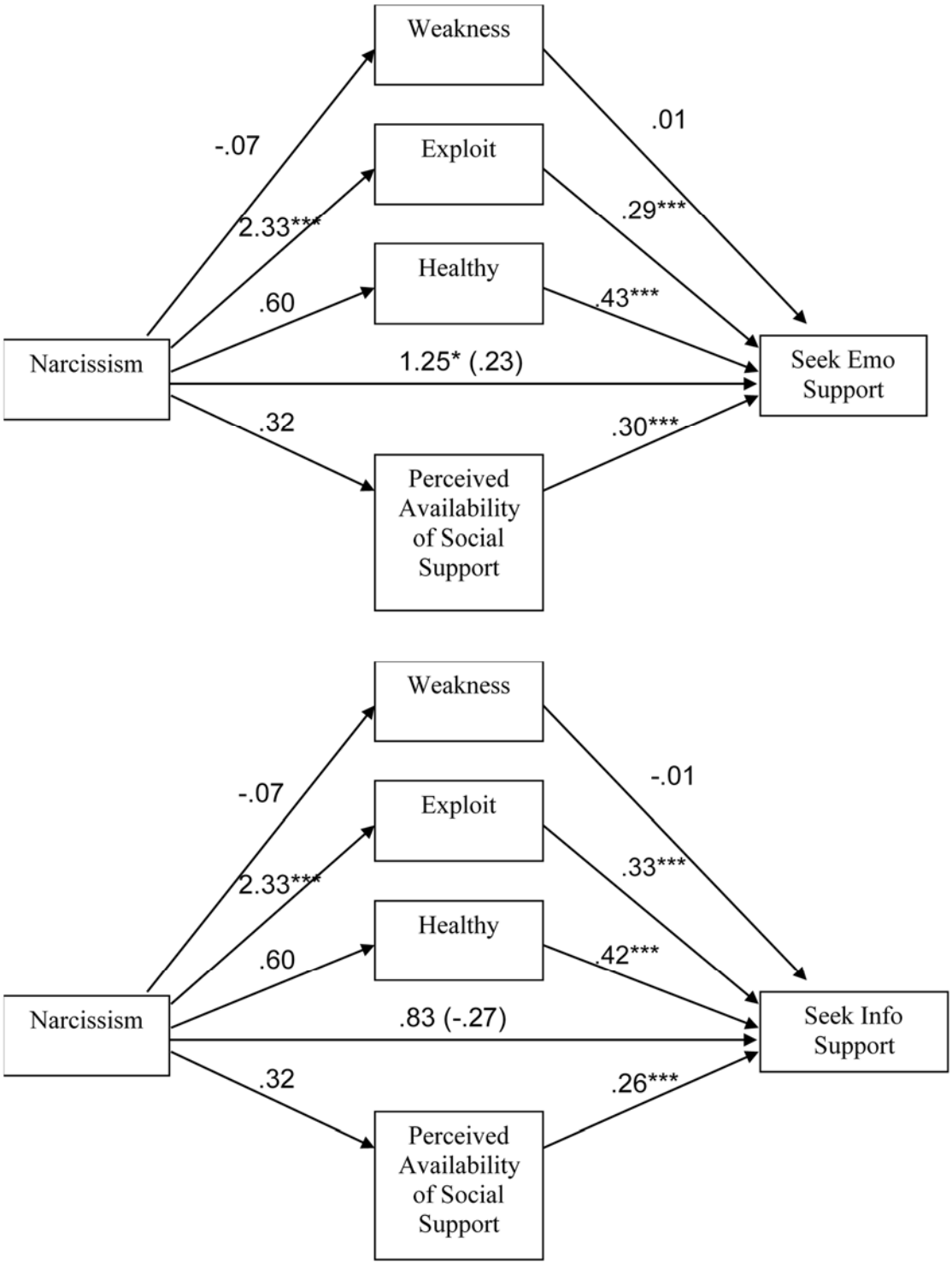
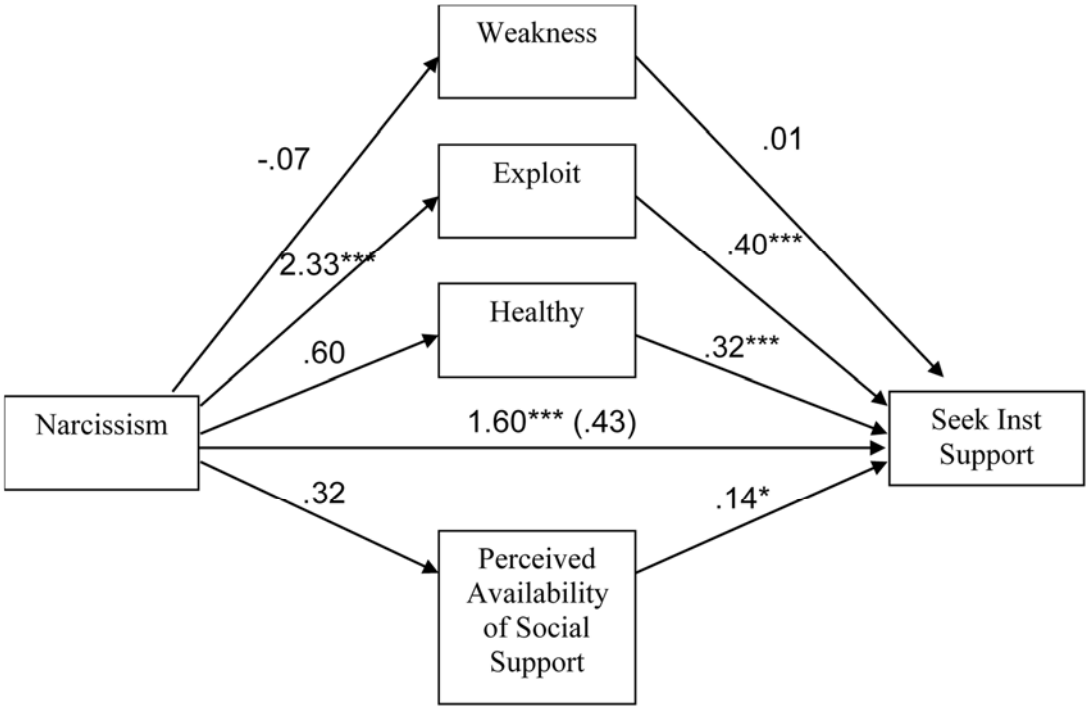


Figure B2.2 Path models of the relations between narcissism, the four mediators, and seeking different subtypes of support (emotional, informational, instrumental, and esteem) support in Study 1. The path coefficients are unstandardized regression coefficients. The value in parentheses is the direct effect (*c'*) of narcissism on seeking support. *$p < .05$, **$p < .01$, ***$p < .001$



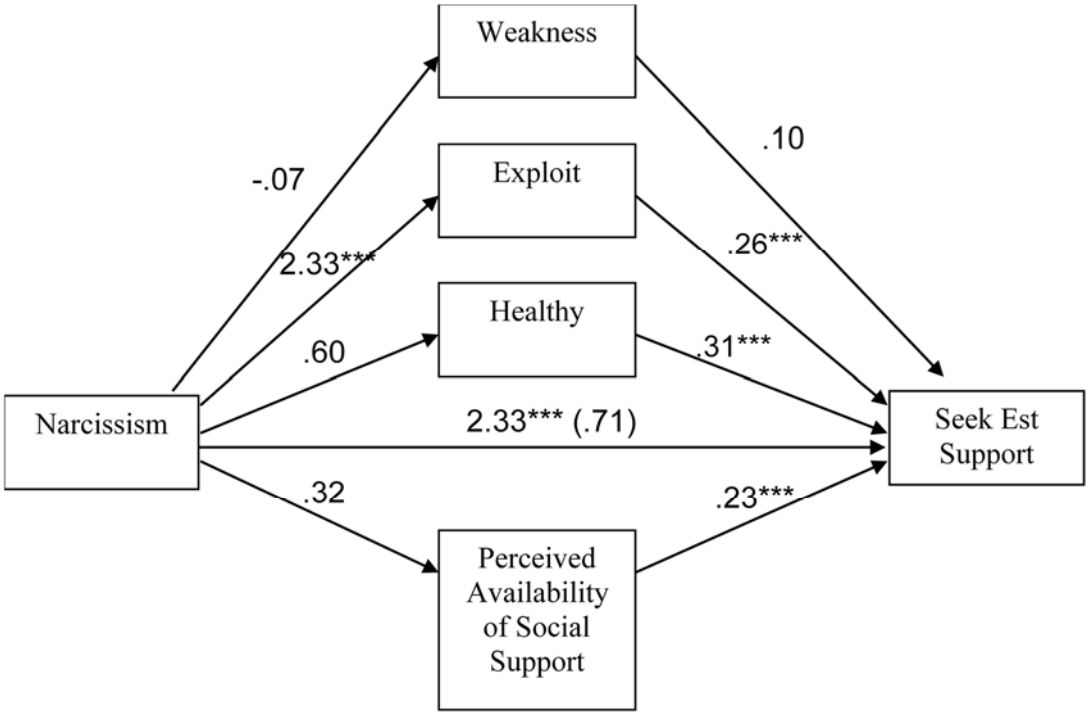


Figure B2.2 (continued).

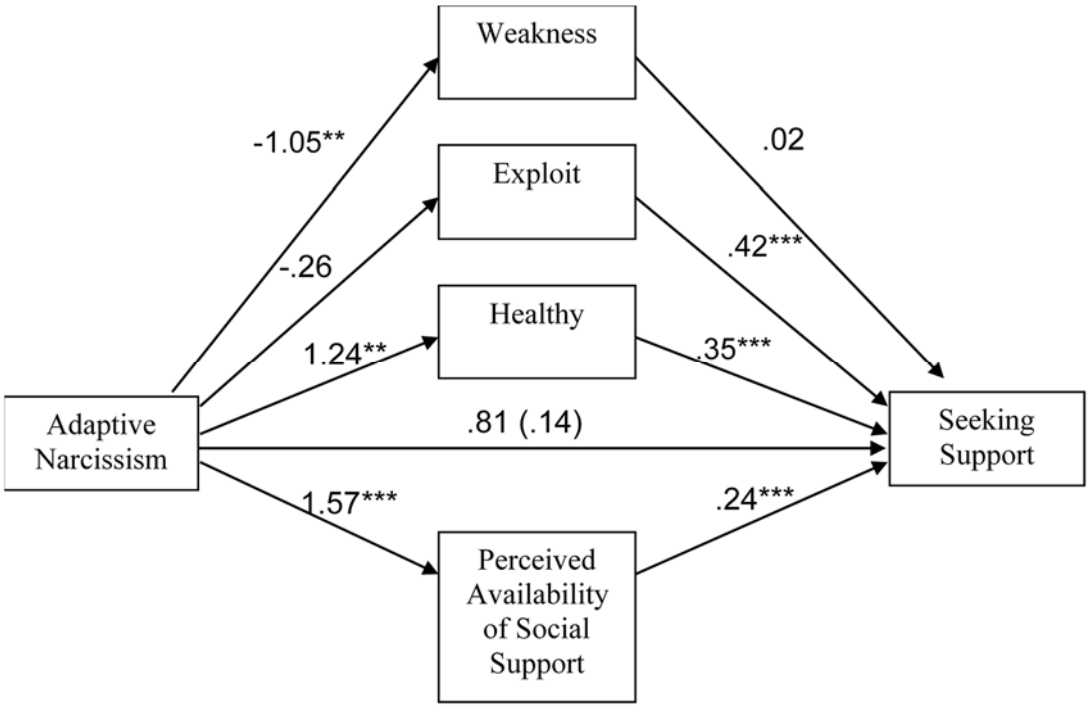


Figure B2.3 Path models of the relations between adaptive narcissism, the four mediators, and seeking support in Study 1 (whilst controlling for maladaptive narcissism). The path coefficients are unstandardized regression coefficients. The value in parentheses is the direct effect (*c'*) of narcissism on seeking support.
*$p < .05$, **$p < .01$, ***$p < .001$

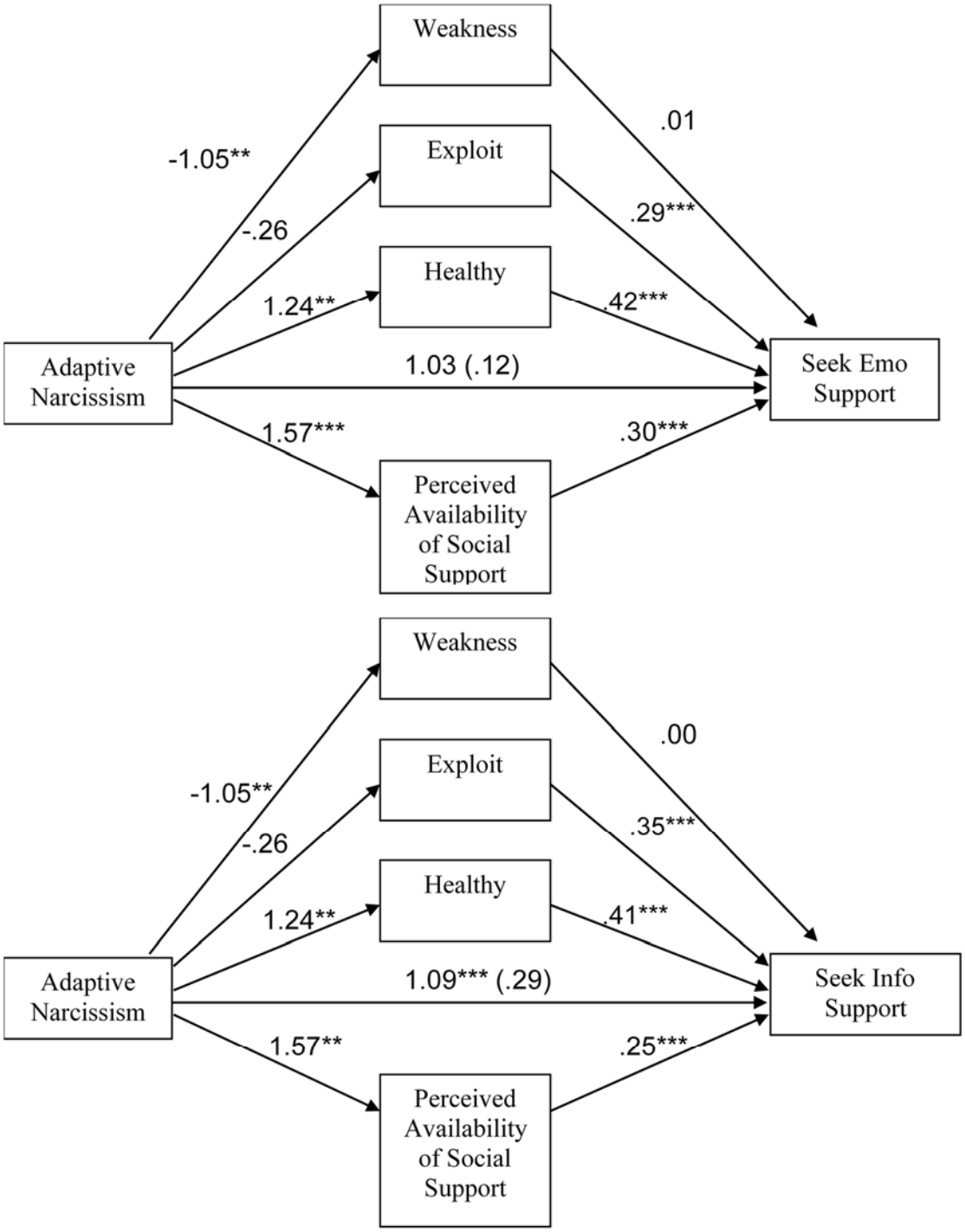


Figure B2.4 Path models of the relations between adaptive narcissism, the four mediators, and seeking different subtypes of support (emotional, informational, instrumental, and esteem) in Study 1(whilst controlling for maladaptive narcissism). The path coefficients are unstandardized regression coefficients. The value in parentheses is the direct effect (*c'*) of narcissism on seeking support. *$p < .05$, **$p < .01$, ***$p < .001$

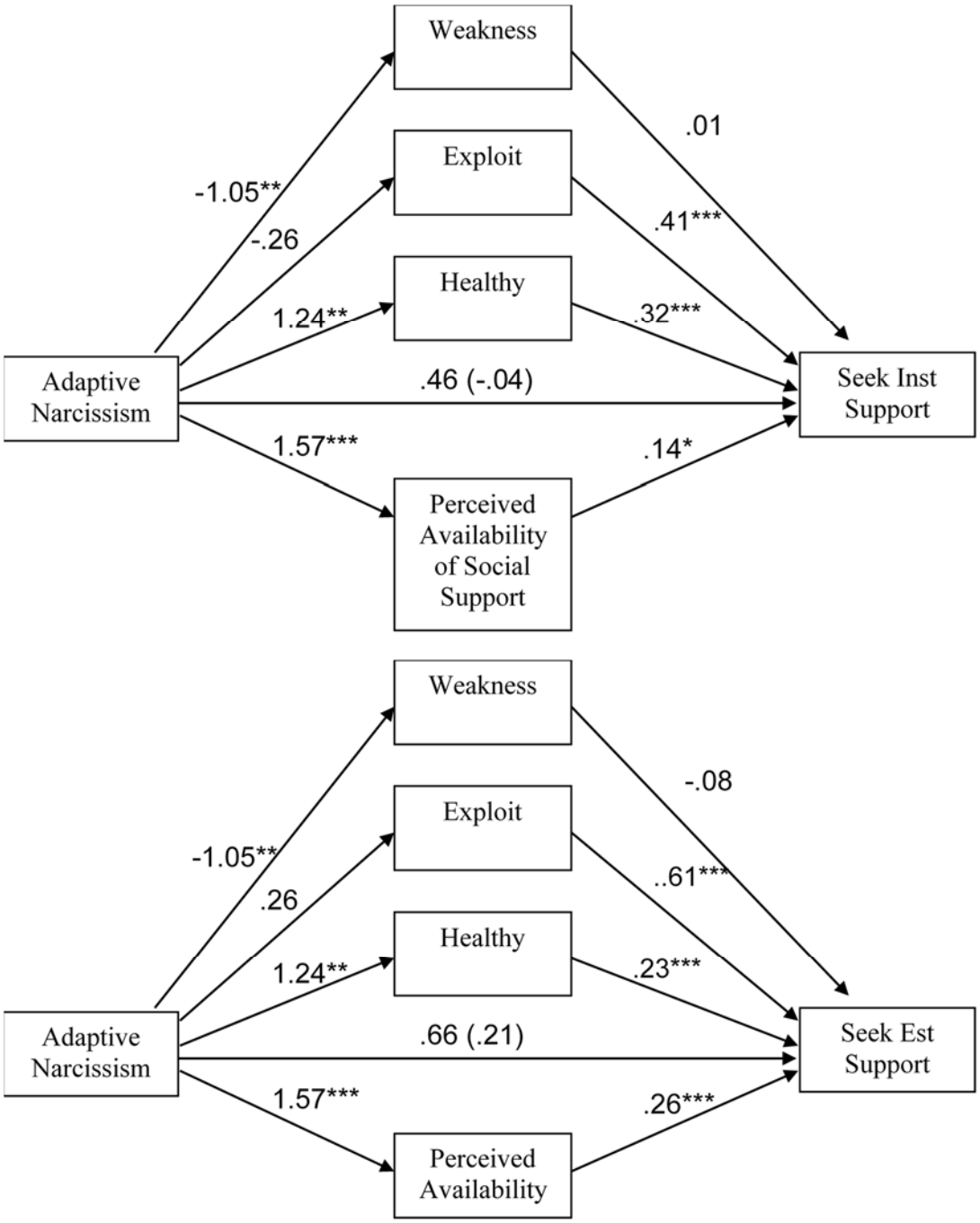


Figure B2.4. (continued)

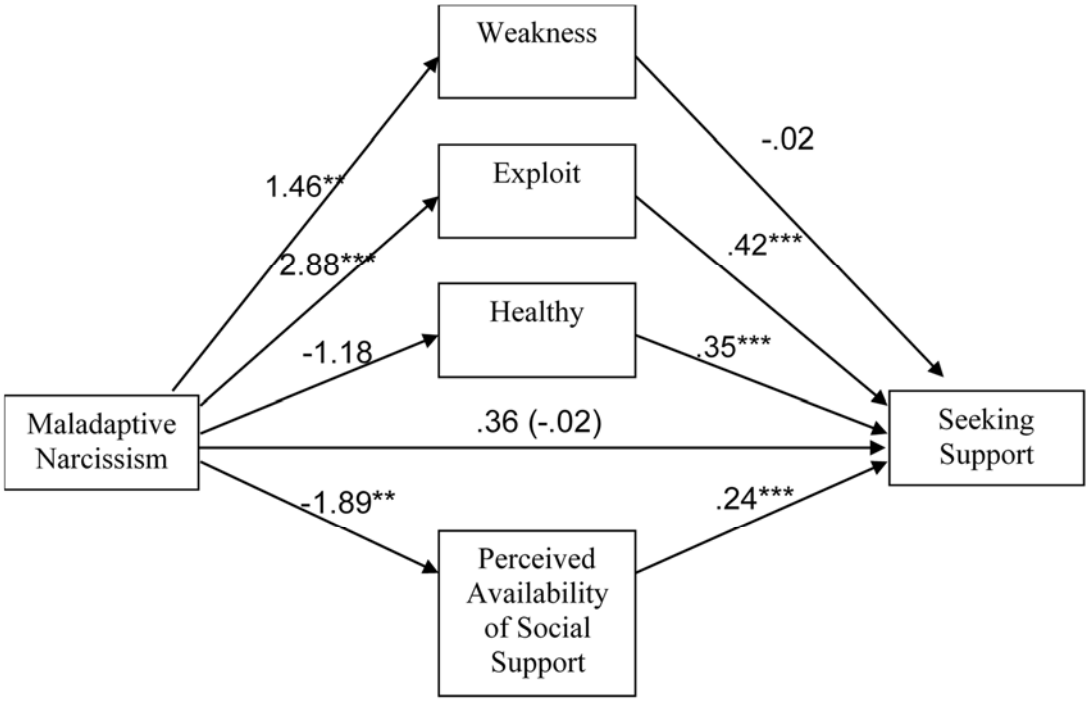


Figure B2.5 Path models of the relations between maladaptive narcissism, the four mediators, and seeking support in Study 1 (whilst controlling for adaptive narcissism). The path coefficients are unstandardized regression coefficients. The value in parentheses is the direct effect (*c'*) of narcissism on seeking support.

*$p < .05$, **$p < .01$, ***$p < .001$

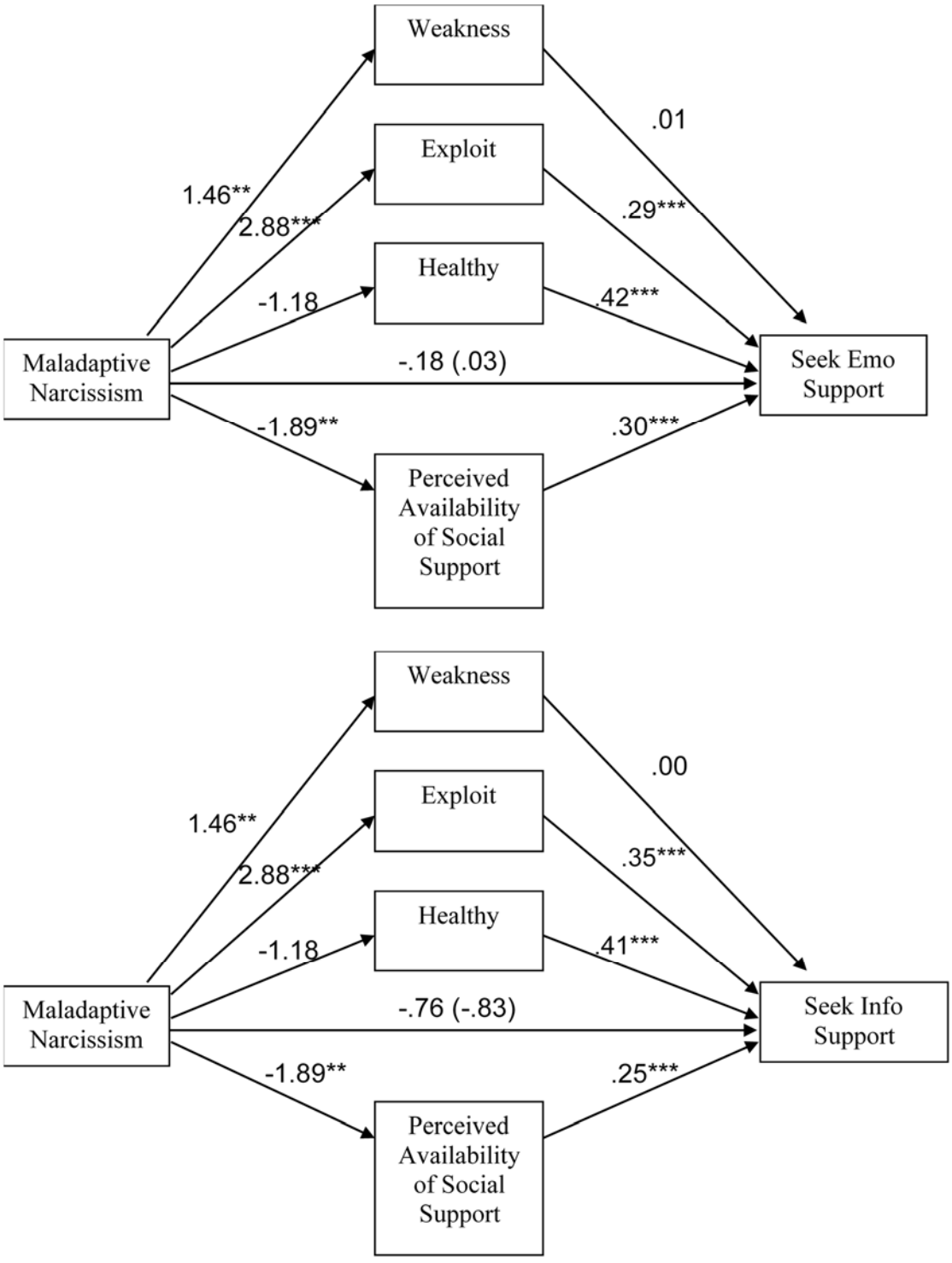
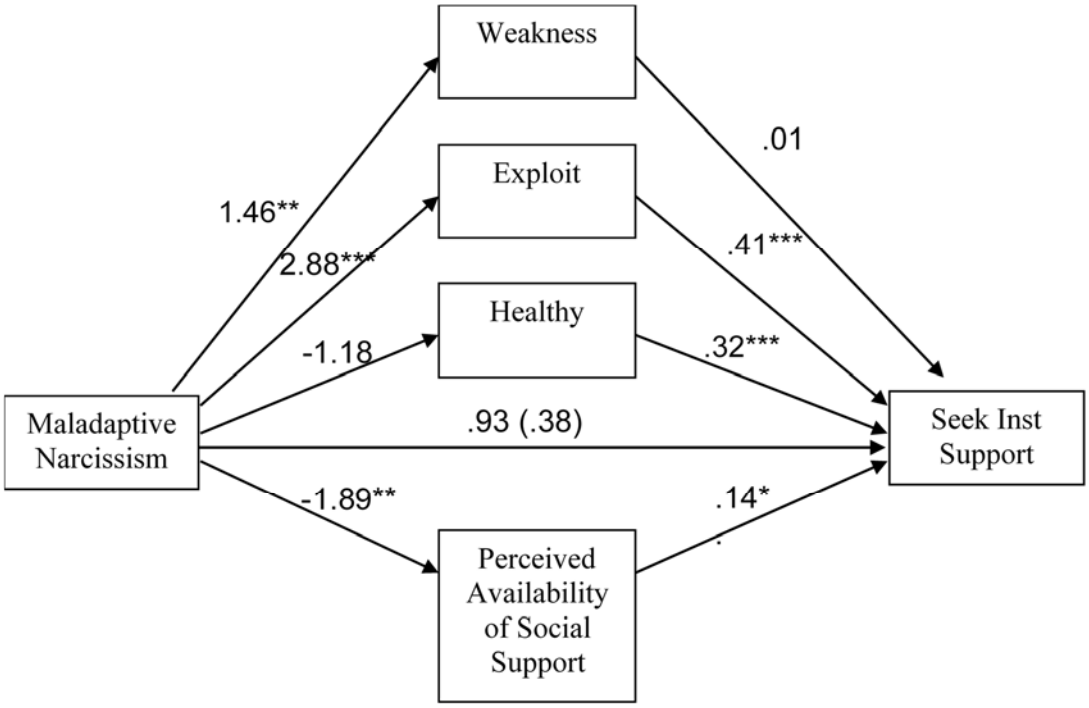


Figure B2.6 Path models of the relations between maladaptive narcissism, the four mediators, and seeking support in Study 1 (whilst controlling for adaptive narcissism). The path coefficients are unstandardized regression coefficients. The value in parentheses is the direct effect (*c'*) of narcissism on seeking support.

*$p < .05$, **$p < .01$, ***$p < .001$



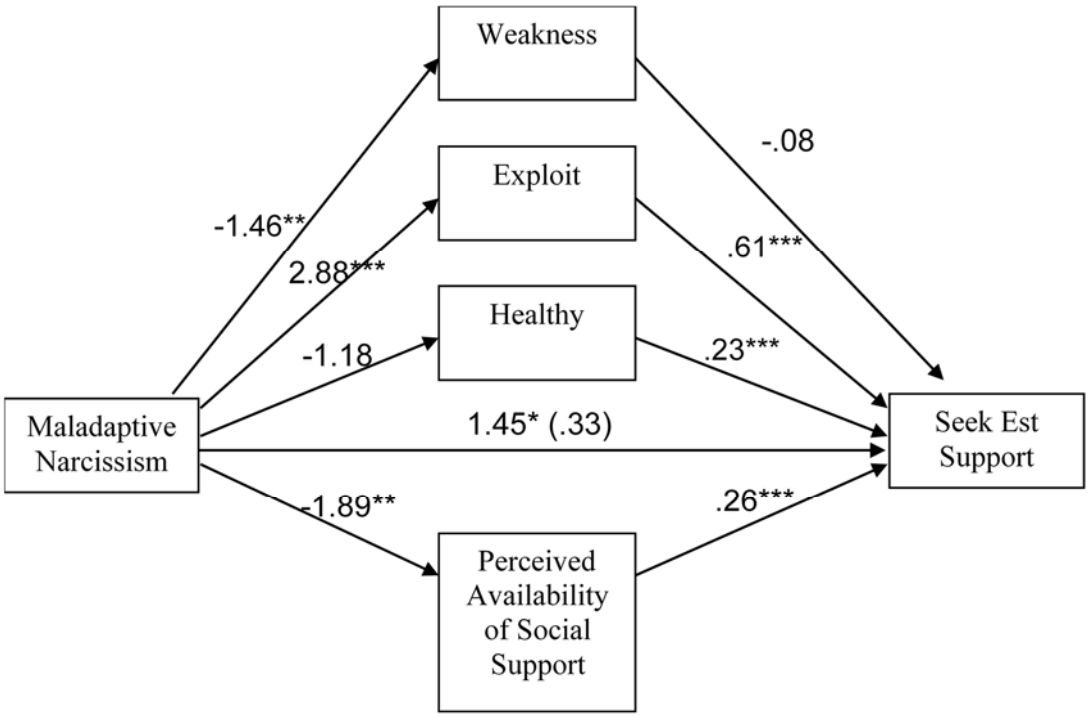


Figure B2.6 (continued).

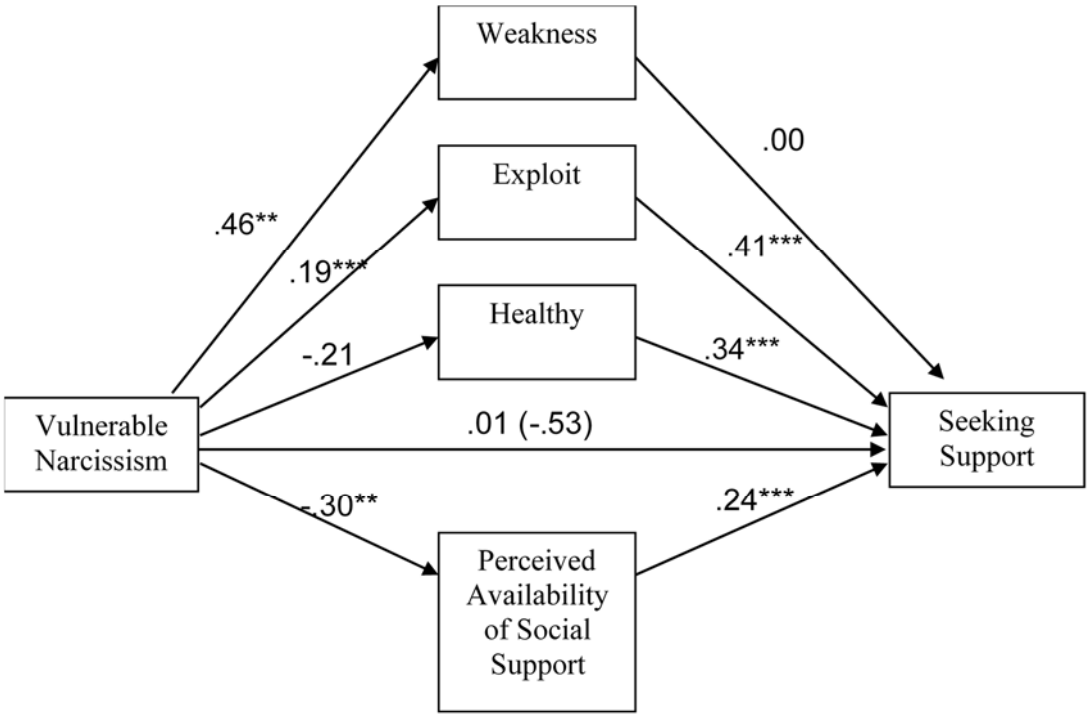


Figure B2.7 Path models of the relations between narcissism, the four mediators, and seeking support in Study 1. The path coefficients are unstandardized regression coefficients. The value in parentheses is the direct effect (*c'*) of narcissism on seeking support. **p* < .05, ***p* < .01, ****p* < .001

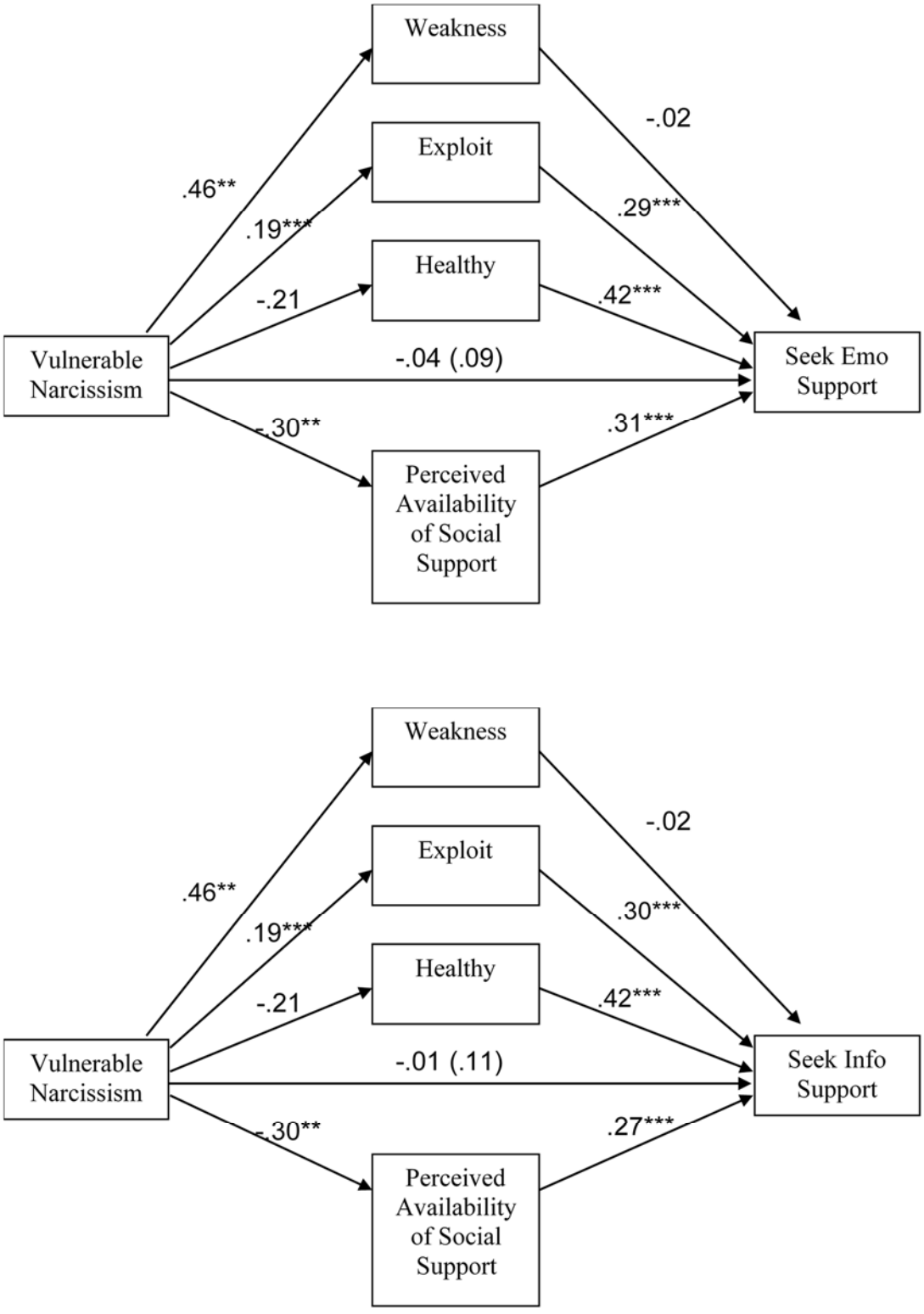
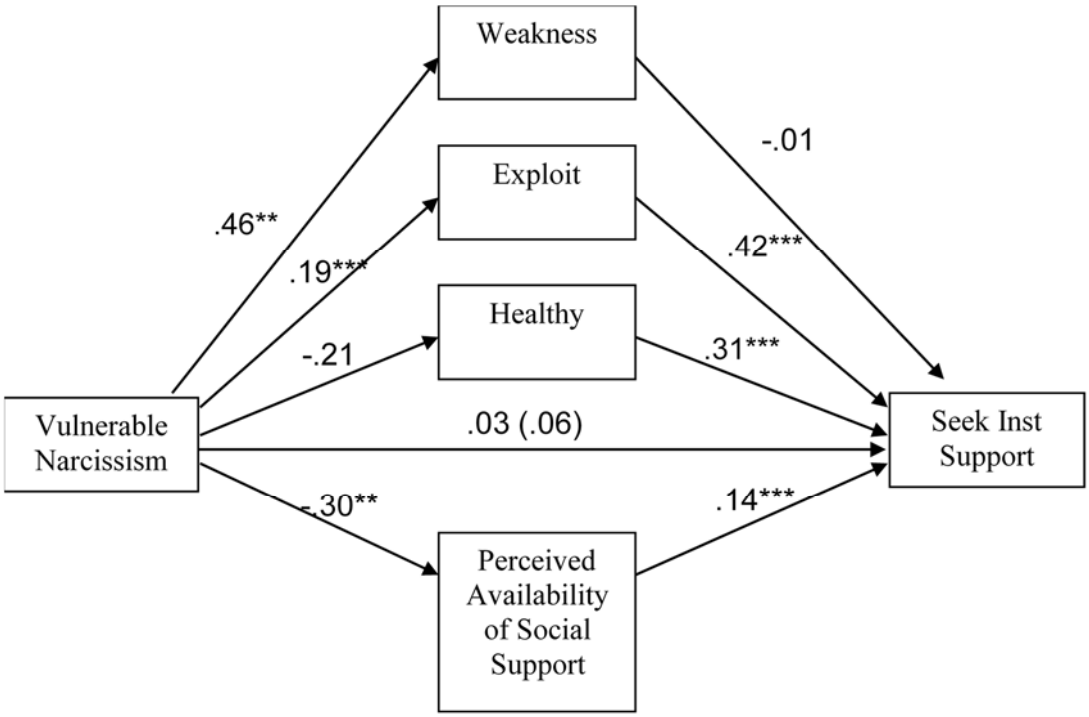


Figure B2.8 Path models of the relations between narcissism, the four mediators, and seeking different subtypes of support (emotional, informational, instrumental, and esteem) support in Study 1. The path coefficients are unstandardized regression coefficients. The value in parentheses is the direct effect (*c'*) of narcissism on seeking support. *$p < .05$, **$p < .01$, ***$p < .001$



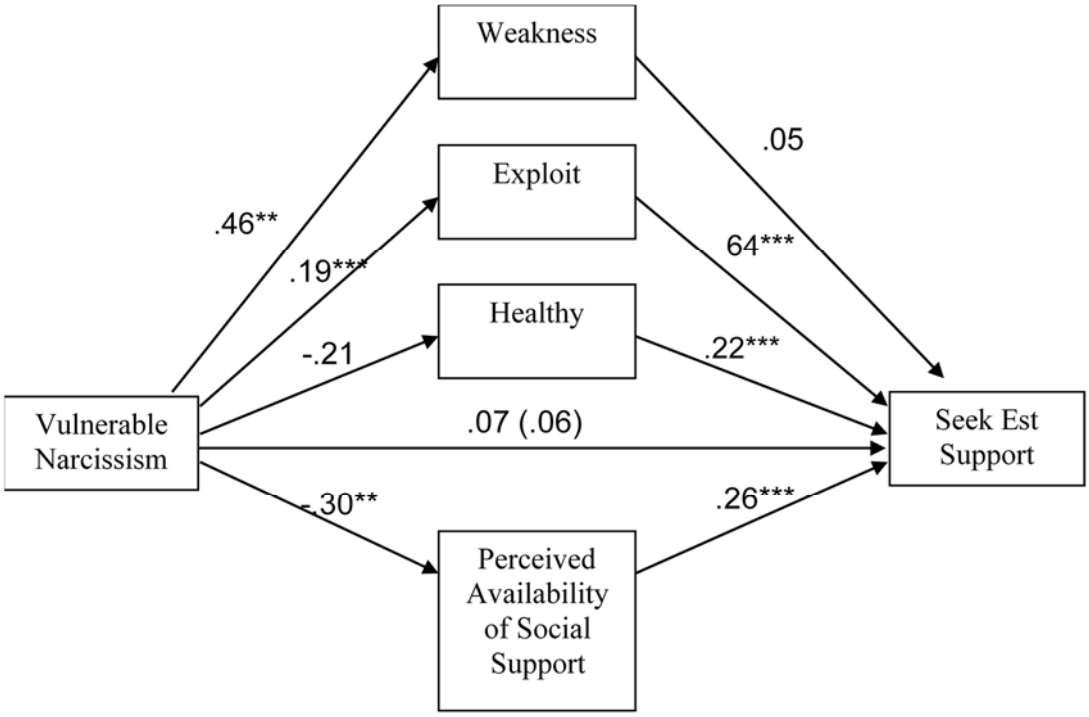


Figure B2.8 (continued).

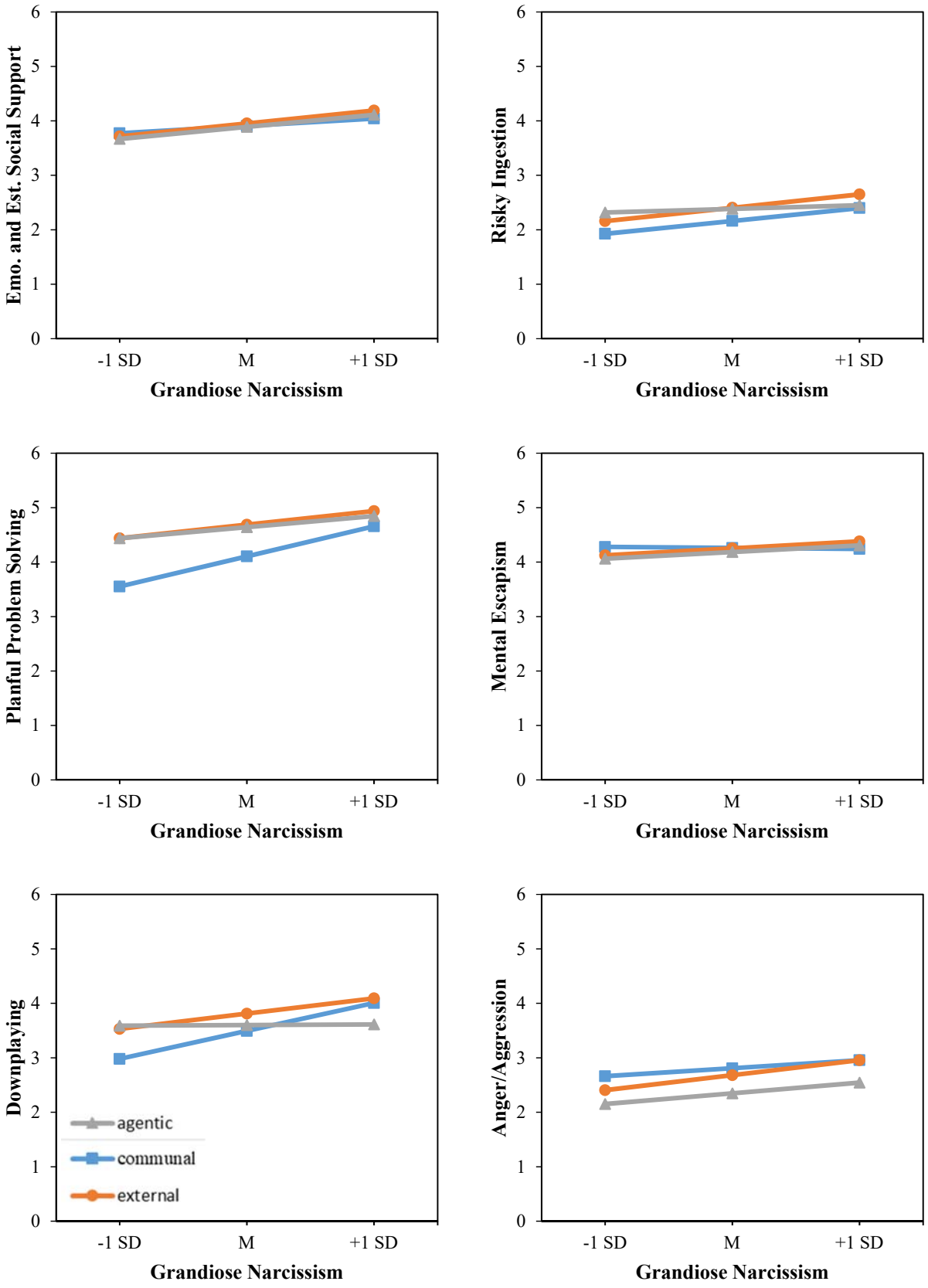


Figure B2.9 A visual representation of the link between grandiose narcissism (measured with NPI; X-axis) and use of **different coping strategies** (Y-axis) depending on type of stressor (agentic, communal, external).

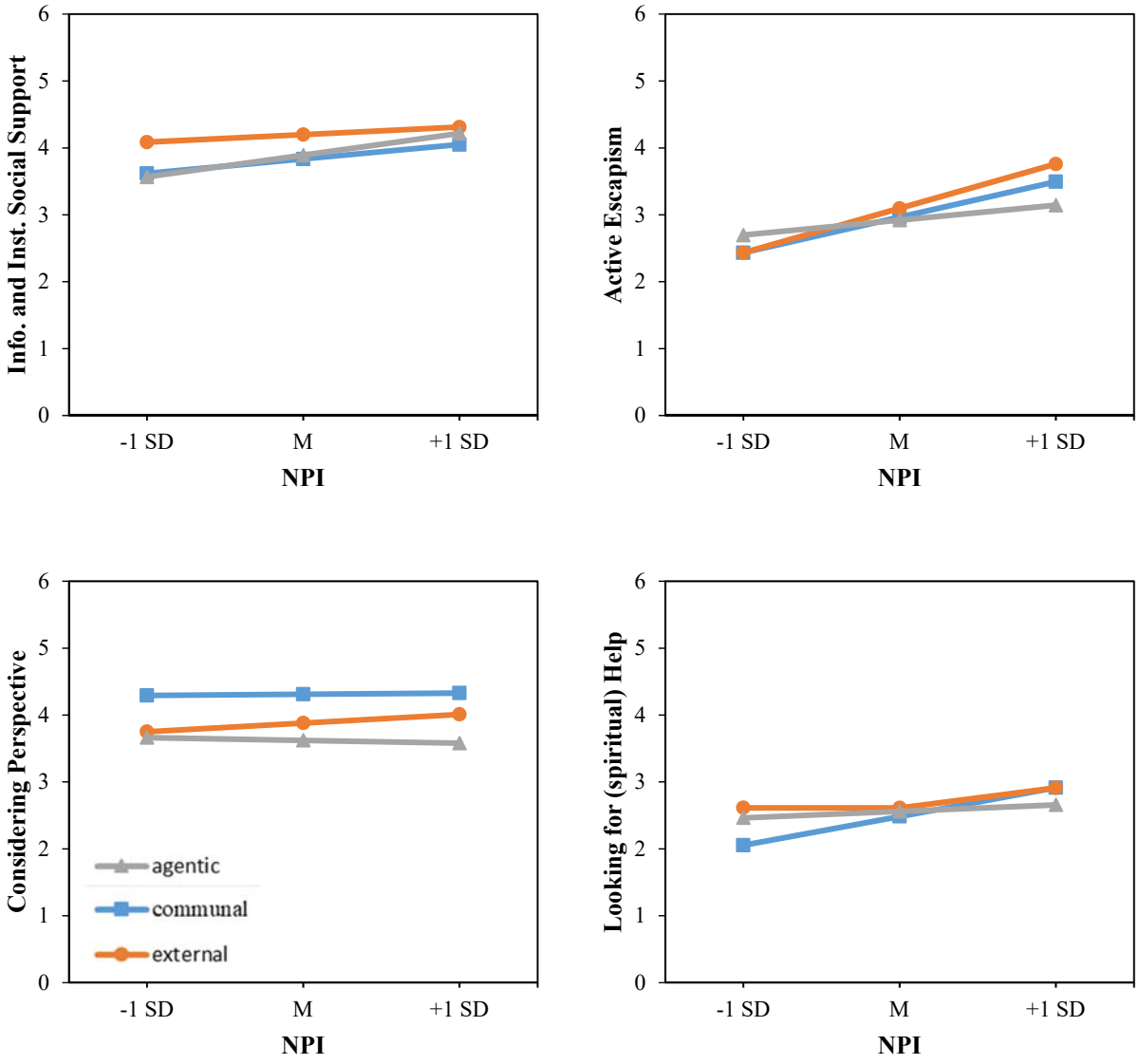


Figure B2.9 (continued).

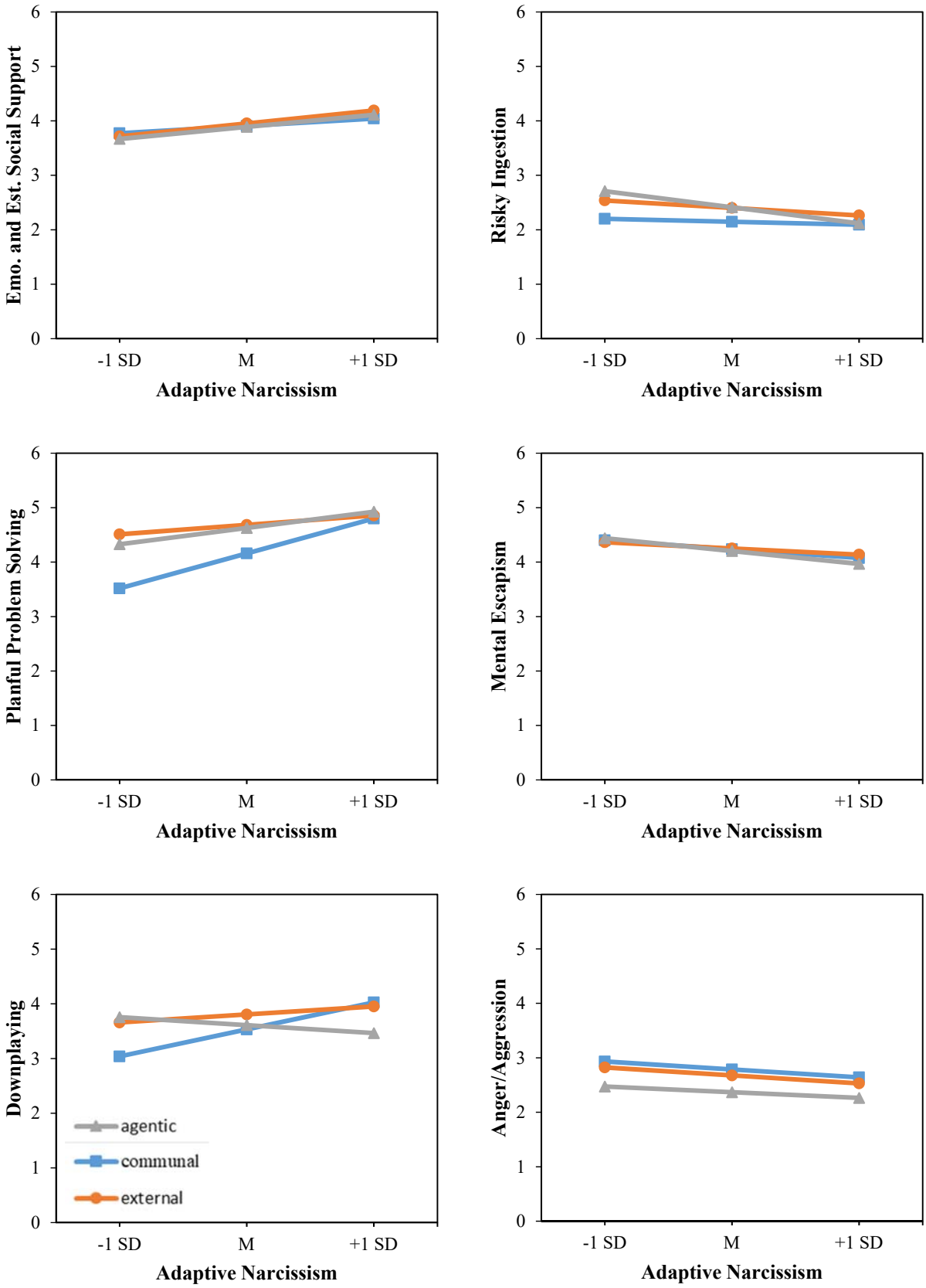


Figure B2.10 A visual representation of the link between adaptive narcissism (measured with NPI; X-axis) and use of **different coping strategies** (Y-axis) depending on type of stressor (agentic, communal, external).

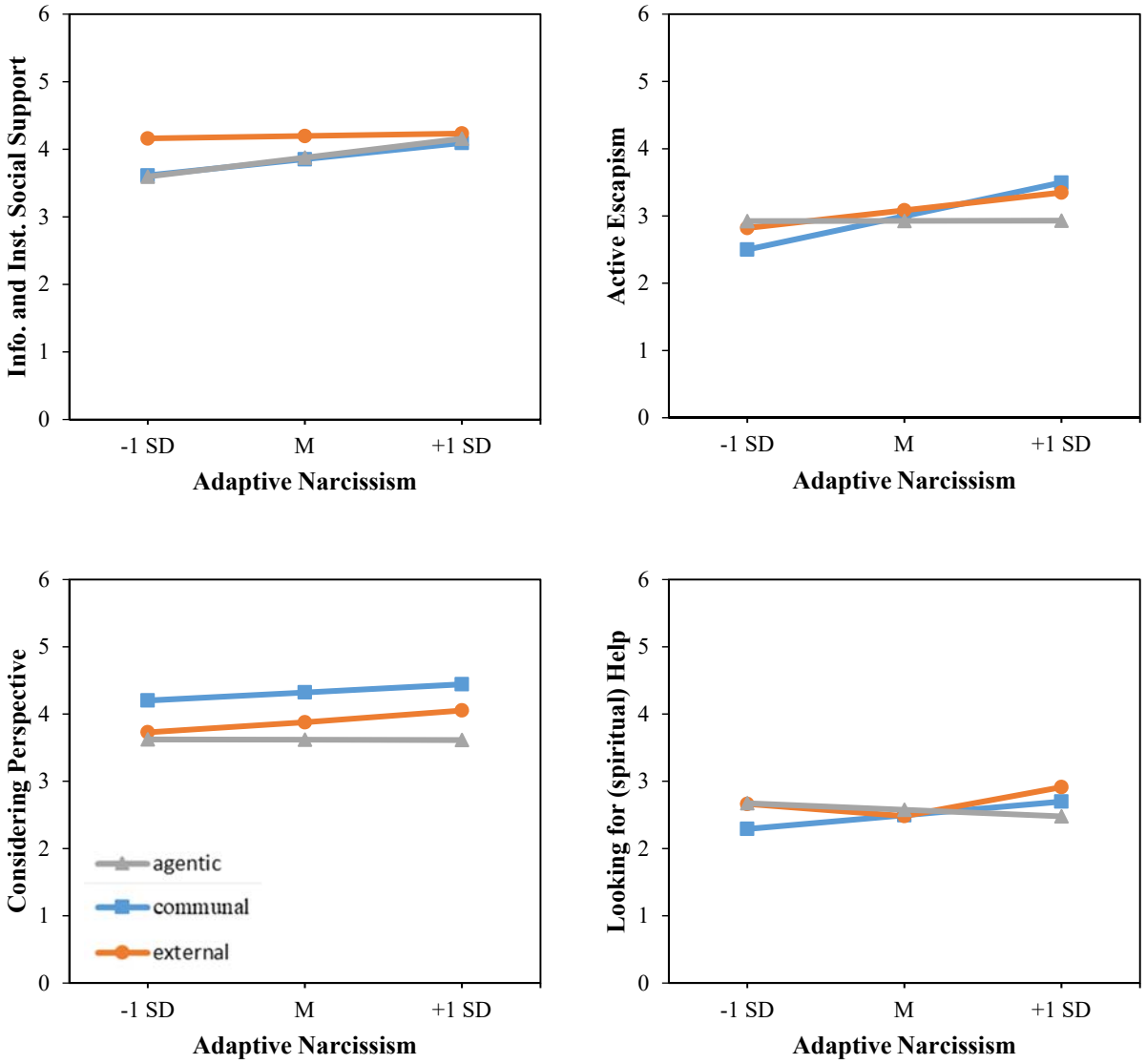


Figure B2.10 (continued).

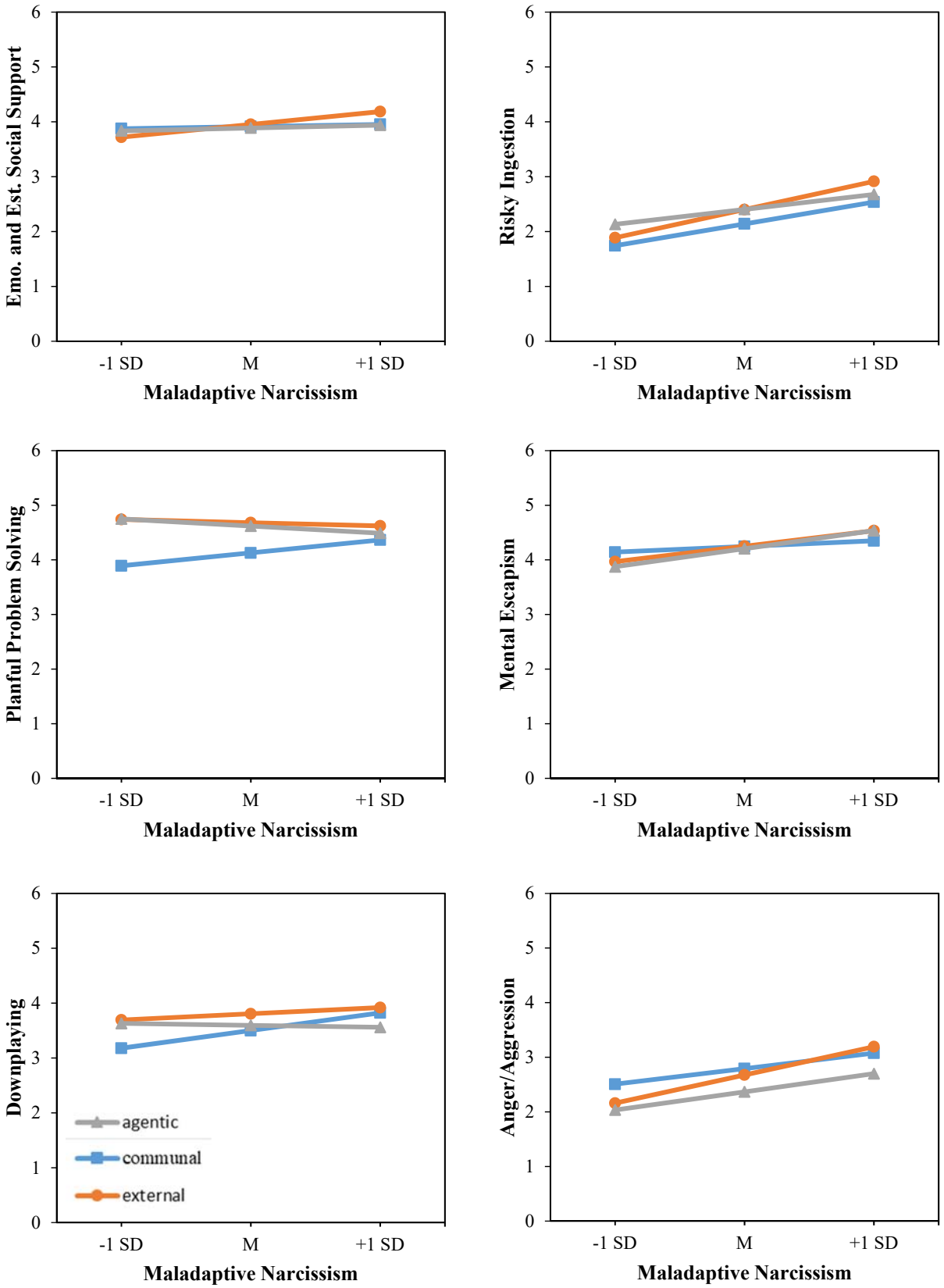


Figure B2.11 *A* visual representation of the link between maladaptive narcissism (measured with NPI; X-axis) and use of **different coping strategies** (Y-axis) depending on type of stressor (agentic, communal, external).

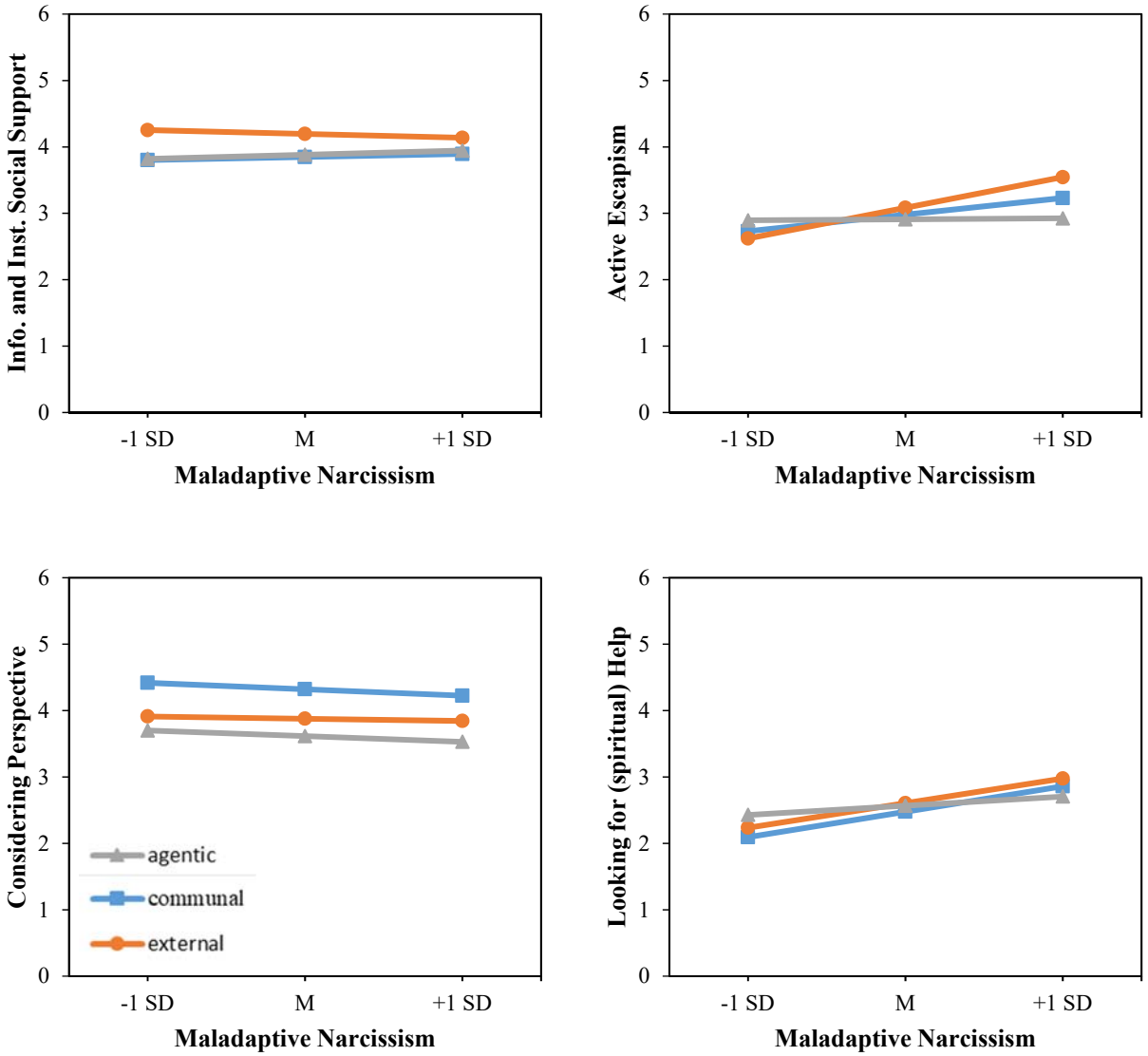


Figure B2.11 (continued).

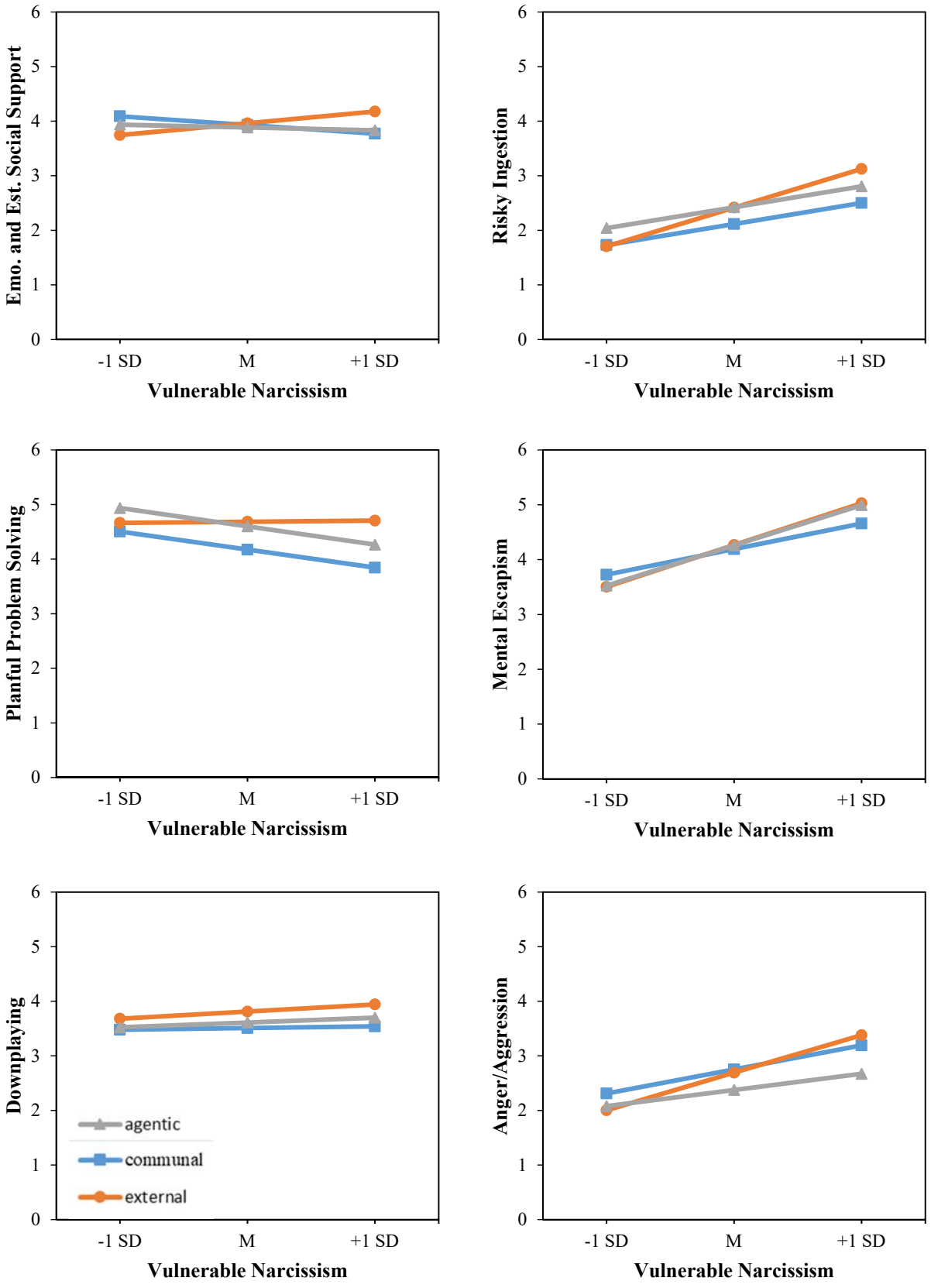


Figure B2.12 A visual representation of the link between vulnerable narcissism (measured with HSNS; X-axis) and use of **different coping strategies** (Y-axis) depending on type of stressor (agentic, communal, external).

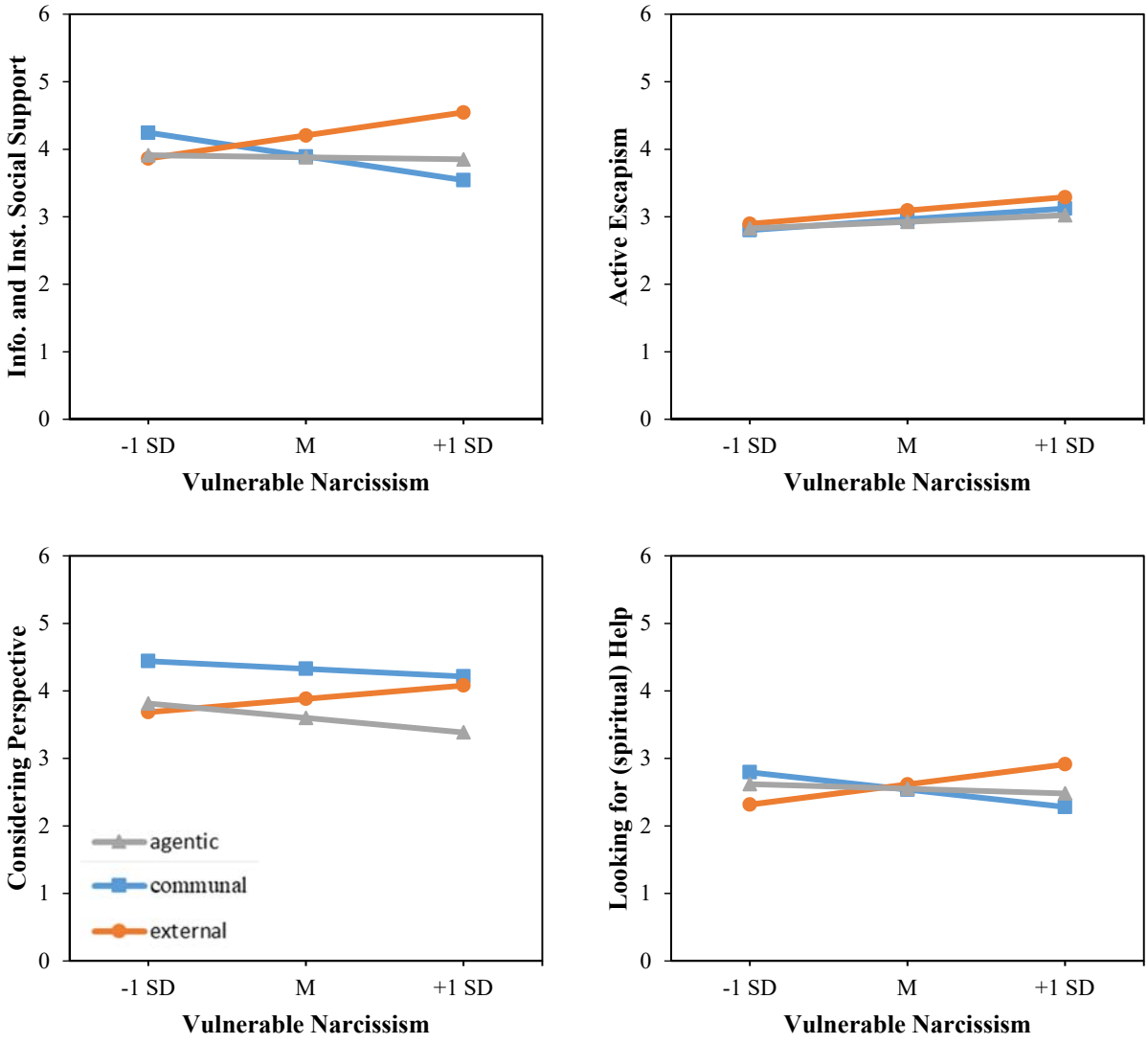


Figure B2.12 (continued).

Appendix C Additional 2-1-2 Moderation Analyses

Additional 2-1-2 Moderation Analyses

The tested model explaining change in *wellbeing* used all subtypes of narcissism as predictor variables and all coping styles as mediators. The outcome variables were change in depression (see Paragraph 3.3.7.1, and Table A3.12), psychological well-being, satisfaction with life, anxiety, social loneliness, and emotional loneliness. For each of these outcome variables, there was no significant difference in their measurements on the first day and on the final day of the study (see Table A3.11). Despite no significant change in these outcome variables, it was decided to run multilevel mediation analyses as described in Paragraph 3.3.7. As stated before, I used difference score because controlling for baseline levels of depression is likely to over-inflate statistical tests. The results of the moderation analyses on use of psychological well-being, satisfaction with life, anxiety, social loneliness, and emotional loneliness, with all types of narcissism as predictor can be found in Tables C1 – C5.

C.1 Direct effects between narcissism and mediators

Since the models have the same mediators, the direct effects between each type of narcissism and the coping styles are similar in all models (see Table C1, panel A). There are positive direct effects between grandiose narcissism and planful problem solving, downplaying, and looking for help. There are positive direct effects between adaptive narcissism and planful problem solving, downplaying, looking for help, and active escapism. However, the latter one is only significant in the models explaining differences in anxiety and emotional loneliness. Furthermore, there is a negative direct effect between adaptive narcissism and mental escapism. For maladaptive narcissism there is only a positive direct effect on use of looking for help. Finally, vulnerable narcissism is positively linked with risky ingestion, mental escapism, anger/aggression, and negatively with planful

problem solving, active escapism (not significant in the model explaining change in Anxiety), and looking for help.

Table C1

Summarising Results of the Multilevel (2-1-2) Mediation Models. Displaying Direct Effects From Each Type of Narcissism (Grandiose, Adaptive, Maladaptive, Vulnerable) to the Mediators (i.e., Coping Styles; Panel A), and from mediators to Change in Psychological Wellbeing, Satisfaction with Life, Anxiety, Social and Emotional Loneliness as Outcome Variable (Panel B)

A

	GN	*AN*	*MN*	*VN*
Social Support	X	x	x	x
Risky Ingestion	X	x	x	+
Planful Problem Solving	+	+	x	-
Mental Escapism	X	-	x	+
Downplaying	+	+	x	
Anger/Aggression	X		x	+
Active Escapism	X	+^	x	-˜
Considering Perspective	X	x	x	x
Looking for Help	+	+	+	-

B

From mediator to outcome variable	**Change in Psychological Wellbeing**	**Change in SWLS**	**Change in Anxiety**	**Change in Social Loneliness**	**Change in Emotional Loneliness**
Social Support	x	x	x	x	x
Risky Ingestion	x	x	x	x	x
Planful Problem Solving	x	x	x	x	x
Mental Escapism	**+GAMV**	**+G**	x	x	**-GV**
Downplaying	x	**-GAM**	x	**+AM**	x
Anger/Aggression	x	x	**+GAMV**	x	x
Active Escapism	x	x	x	x	x
Considering Perspective	x	x	x	x	x
Looking for Help	x	**-AM**	x	**+GAM**	**+AMV**

GN=Grandiose Narcissism; AN=Adaptive Narcissism; MN= Maladaptive Narcissism; VN=Vulnerable Narcissism;
text in red = negative effect; text in green = positive effect; x = were non-significant effects; ° = only marginally significant; ˜ = not significant in Anxiety; ^ = significant in Anxiety and Emotional Loneliness

The direct effects between mediators and outcome variables (see Table C1, panel B) showed that social support, risky ingestion, planful problem solving, active escapism, and considering perspective, were not significantly linked to any of the changes in wellbeing. Mental escapism was shown as having a positive effect in change in psychological wellbeing (for all types of narcissists), change in satisfaction with life (for grandiose narcissists), and emotional loneliness (only for grandiose and vulnerable

narcissists). Downplaying was linked to a decrease in change of satisfaction with life (for grandiose, adaptive, and maladaptive narcissists), and increase in change of social loneliness (for adaptive and maladaptive narcissists). For all types of narcissism, use of anger/aggression as a coping style was positively linked with change in anxiety. Finally, looking for help was positively linked with change in social loneliness (for grandiose, adaptive, and vulnerable narcissists), and change in emotional loneliness (for adaptive, maladaptive, and vulnerable narcissists), and negatively linked with change in satisfaction with life (for adaptive and maladaptive narcissists).

C.2 Indirect effects

C.2.1 Psychological Wellbeing

The model with grandiose narcissism as predictor explained 20.1% of the variance in *change in psychological wellbeing*, but was not significant, $p = .051$ (Table C2 , left panel), and neither was the model with vulnerable narcissism as predictor (variance is 1.7%, $p = .88$).

The breakdown of grandiose narcissism into adaptive and maladaptive components, showed that these models were significant and explained respectively 21.9% and 20.2% of the variance in change in psychological well-being (Table C2, middle panel). In the model with adaptive narcissism as predictor, there was a significant negative indirect effect from adaptive narcissism to change in psychological wellbeing via mental escapism, meaning that higher adaptive narcissism was associated with lower mental escapism, which in turn was associated with lower change in psychological wellbeing.

C.2.2 Satisfaction with Life

The tested model with *change in satisfaction with life* as outcome variable, significantly explained, depending on focal predictor, between 15.8% and 22.2% of the variance (see Table C3). The model with grandiose narcissism as predictor (see Table C3, left panel) had a significant positive direct effect between narcissism and change in

satisfaction with life, meaning participants became less satisfied with life over time. There were no significant indirect effects from any type of narcissism via any of the coping styles.

C.2.3 Anxiety

The tested model with grandiose or maladaptive narcissism as focal predictor and *change in anxiety* as outcome variable were non-significant models explaining respectively 16.6%, $p = .084$, or 19.5%, $p = .060$, of the variance in change in anxiety (see Table C4). The models with adaptive and vulnerable narcissism as predictor were significant, but did not depict any significant direct effects between narcissism and change in anxiety, or significant indirect effects via any of the coping styles.

C.2.4 Social Loneliness

The tested model with *change in social loneliness* as outcome variable, significantly explained, depending on focal predictor, between 16.9% and 20.5% of the variance (see Table C5). None of the four models depicted any significant direct effects between type of narcissism and change in social loneliness, or significant indirect effects between type of narcissism and change in social loneliness via any of the coping styles.

C.2.5 Emotional Loneliness

The tested model with grandiose or vulnerable narcissism as focal predictor and *change in emotional loneliness* as outcome variable were non-significant models explaining respectively 14.5 %, $p = .153$, or 15.1%, $p = .140$, of the variance in change in emotional loneliness (see Table C6). The models with adaptive and maladaptive narcissism as predictor were significant, but did not depict any significant direct effects between narcissism and change in anxiety, or significant indirect effects via any of the coping styles.

Table C2

*Results From Multilevel (2-1-2) Mediation Models, with Change in **Psychological Wellbeing** as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.*

	GN		**AN**		**MN**		**VN**	
	R^2	*p*	R^2	*p*	R^2	*p*	R^2	*p*
Model fit	.201	.051	**.219**	**.031**	**.202**	**.045**	.017	.876
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: Social Support	0.98	.15	0.38	.43	0.49	.47	-0.12	.11
M_2: RI	-0.01	.99	-0.38	.38	0.66	.22	**0.22**	**.001**
M_3: PPS	**1.47**	**.037**	**1.44**	**.005**	0.65	.35	**-0.24**	**.011**
M_4: ME	-1.15	.08	**-1.65**	**<.001**	-0.02	.98	**0.49**	**<.001**
M_5: D	**1.29**	**.036**	**0.96**	**.021**	0.95	.11	-0.09	.24
M_6: A/A	0.21	.69	-0.18	.65	0.68	.21	**0.20**	**.004**
M_7: AE	0.99	.13	0.91	.051	0.09	.88	**-0.15**	**.050**
M_8: CP	1.01	.08	0.61	.15	0.60	.31	-0.06	.44
M_9: LfH	**1.62**	**.007**	**0.98**	**.031**	**1.09**	**.046**	**-0.15**	**.022**
From mediator to outcome variable	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: Social Support	-0.08	.14	-0.07	.16	-0.07	.16	-0.07	.20
M_2: RI	0.03	.65	0.02	.71	0.02	.71	0.02	.72
M_3: PPS	0.09	.18	0.09	.15	0.09	.16	0.09	.16
M_4: ME	**0.19**	**.003**	**0.18**	**.010**	**0.17**	**.011**	**0.19**	**.010**
M_5: D	-0.06	.39	-0.06	.36	-0.06	.36	-0.05	.38
M_6: A/A	-0.09	.26	-0.10	.21	-0.10	.21	-0.10	.21
M_7: AE	-0.03	.66	-0.01	.88	-0.01	.87	-0.02	.77
M_8: CP	-0.07	.45	-0.07	.43	-0.07	.45	-0.07	.43
M_9: LfH	0.01	.81	0.00	.99	0.00	1.00	0.01	.75
Indirect effects via mediator	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: Social Support	-0.07	.32	-0.03	.50	-0.04	.52	0.01	.31
M_2: RI	0.00	.99	-0.01	.72	0.01	.72	0.00	.72
M_3: PPS	0.13	.29	0.14	.22	0.06	.46	-0.02	.22
M_4: ME	-0.21	.13	**-0.30**	**.031**	0.00	.98	**0.09**	**.011**
M_5: D	0.07	.44	-0.06	.41	-0.06	.45	0.01	.45
M_6: A/A	-0.02	.69	0.02	.68	-0.07	.31	-0.02	.28
M_7: AE	-0.03	.67	-0.01	.88	0.00	.91	0.00	.78
M_8: CP	-0.07	.50	-0.04	.49	-0.04	.55	0.00	.59
M_9: LfH	0.02	.81	0.00	.99	0.00	1.00	0.00	.75
Direct effects	*c'*	*p*	*c'*	*p*	*c'*	*p*	*c'*	*p*
narcissism to outcome variable	0.08	.81	-0.15	.68	0.45	.29	0.01	.88
Controlling for other type of narc			0.41	.33	-0.26	.44		

Note: RI = Risky Ingestion, PPS = Planful Problem Solving, ME = Mental Escapism, D=Downplaying, A/A=Anger/Aggression, AE=Active Escapism, CP=Considering Perspective, LfH=Looking for (spiritual) Help.

Appendix C – Additional 2-1-2 Moderation Analyses

Table C3

*Results From Multilevel (2-1-2) Mediation Models, with Change in **Satisfaction with Life** as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.*

	GN		**AN**		**MN**		**VN**	
	R^2	*p*	R^2	*p*	R^2	*p*	R^2	*p*
Model fit	**.206**	**.012**	**.222**	**.010**	**.214**	**.011**	**.158**	**.038**
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: Social Support	0.98	.15	0.38	.43	0.49	.47	-0.12	.10
M_2: RI	-0.01	.98	-0.38	.38	0.66	.22	**0.22**	**.001**
M_3: PPS	**1.47**	**.036**	**1.44**	**.005**	0.65	.34	**-0.24**	**.011**
M_4: ME	-1.15	.08	**-1.66**	**<.001**	-0.01	.99	**0.49**	**<.001**
M_5: D	**1.28**	**.038**	**0.96**	**.021**	0.94	.12	-0.09	.24
M_6: A/A	0.21	.69	-0.18	.65	0.67	.21	**0.20**	**.004**
M_7: AE	1.00	.13	0.91	.05	0.10	.88	**-0.15**	**.049**
M_8: CP	1.02	.08	0.61	.15	0.60	.30	-0.06	.43
M_9: LfH	**1.61**	**.007**	**0.98**	**.031**	**1.09**	**.046**	**-0.15**	**.022**
From mediator to outcome variable	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: Social Support	-0.08	.49	-0.06	.58	-0.06	.58	-0.06	.59
M_2: RI	-0.01	.95	-0.02	.87	-0.02	.87	-0.01	.89
M_3: PPS	0.11	.28	0.10	.30	0.10	.30	0.10	.33
M_4: ME	**0.22**	**.034**	0.21	.06	0.21	.06	0.17	.22
M_5: D	**-0.23**	**.027**	**-0.24**	**.026**	**-0.23**	**.027**	-0.18	.08
M_6: A/A	-0.13	.25	-0.14	.21	-0.14	.22	-0.13	.26
M_7: AE	0.12	.30	0.14	.24	0.14	.24	0.13	.28
M_8: CP	0.15	.31	0.16	.27	0.16	.27	0.17	.23
M_9: LfH	-0.19	.06	**-0.19**	**.050**	**-0.19**	**.050**	-0.16	.12
Indirect effects via mediator	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: Social Support	-0.08	.56	-0.02	.68	-0.03	.67	0.01	.61
M_2: RI	0.00	.99	0.01	.88	-0.01	.87	0.00	.90
M_3: PPS	0.16	.38	0.15	.35	0.07	.52	-0.02	.38
M_4: ME	-0.25	.17	-0.36	.08	0.00	.99	0.08	.23
M_5: D	-0.30	.14	-0.23	.11	-0.22	.21	0.02	.33
M_6: A/A	-0.03	.72	0.03	.66	-0.09	.40	-0.03	.30
M_7: AE	0.12	.40	0.13	.33	0.01	.88	-0.02	.33
M_8: CP	0.15	.37	0.10	.37	0.09	.45	-0.01	.50
M_9: LfH	-0.30	.11	-0.19	.15	-0.21	.13	0.02	.20
Direct effects	*c'*	*p*	*c'*	*p*	*c'*	*p*	*c'*	*p*
narcissism to outcome variable	**1.13**	**.047**	0.29	.58	1.04	.12	0.03	.76
Controlling for other type of narc			0.96	.14	0.19	.70		

Note: RI = Risky Ingestion, PPS = Planful Problem Solving, ME = Mental Escapism, D=Downplaying, A/A=Anger/Aggression, AE=Active Escapism, CP=Considering Perspective, LfH=Looking for (spiritual) Help.

Table C4

*Results From Multilevel (2-1-2) Mediation Models, with Change in **Anxiety** as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.*

	GN		**AN**		**MN**		**VN**	
	R^2	*p*	R^2	*p*	R^2	*p*	R^2	*p*
Model fit	.166	.084	**.204**	**.049**	.195	.060	**.205**	**.024**
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: Social Support	0.96	.16	0.37	.44	0.47	.49	-0.13	.10
M_2: RI	-0.01	.99	-0.38	.38	0.66	.22	**0.22**	**.001**
M_3: PPS	**1.45**	**.039**	**1.43**	**.006**	0.64	.36	**-0.24**	**.012**
M_4: ME	-1.16	.08	**-1.66**	**<.001**	-0.01	.98	**0.49**	**< .001**
M_5: D	**1.28**	**.037**	**0.96**	**.021**	0.95	.12	-0.09	.24
M_6: A/A	0.20	.71	-0.19	.64	0.66	.23	**0.20**	**.005**
M_7: AE	1.01	.13	**0.91**	**.049**	0.12	.86	-0.15	.054
M_8: CP	1.00	.08	0.60	.15	0.59	.32	-0.06	.44
M_9: LfH	**1.62**	**.007**	**0.98**	**.031**	**1.10**	**.045**	**-0.15**	**.023**
From mediator to outcome variable	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: Social Support	0.24	.06	0.22	.06	0.22	.06	0.19	.12
M_2: RI	-0.05	.60	-0.04	.70	-0.04	.70	-0.03	.76
M_3: PPS	0.12	.29	0.12	.29	0.12	.29	0.13	.24
M_4: ME	-0.05	.66	-0.02	.87	-0.02	.86	0.12	.42
M_5: D	0.08	.57	0.09	.53	0.09	.54	0.05	.71
M_6: A/A	**0.26**	**.038**	**0.28**	**.024**	**0.28**	**.024**	**0.30**	**.023**
M_7: AE	-0.21	.19	-0.25	.11	-0.24	.12	-0.26	.10
M_8: CP	0.10	.57	0.09	.59	0.09	.59	0.06	.72
M_9: LfH	-0.10	.44	0.07	.55	-0.07	.54	-0.12	.32
Indirect effects via mediator	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: Social Support	0.23	.27	0.08	.48	0.11	.51	-0.02	.27
M_2: RI	0.00	.99	0.02	.71	-0.03	.72	-0.01	.77
M_3: PPS	0.18	.35	0.17	.34	0.07	.48	-0.03	.29
M_4: ME	0.06	.67	0.03	.87	0.00	.98	0.06	.44
M_5: D	0.11	.59	0.09	.56	0.09	.58	-0.01	.72
M_6: A/A	0.05	.71	-0.05	.65	0.19	.26	0.06	.10
M_7: AE	-0.21	.32	-0.23	.22	-0.03	.86	0.04	.22
M_8: CP	0.10	.58	0.05	.61	0.05	.62	0.00	.75
M_9: LfH	-0.15	.46	-0.07	.57	-0.08	.57	0.02	.37
Direct effects	*c'*	*p*	*c'*	*p*	*c'*	*p*	*c'*	*p*
narcissism to outcome variable	-0.51	.58	0.38	.55	-1.37	.09	**-0.26**	**.021**
Controlling for other type of narc			-1.23	.14	0.43	.46		

Note: RI = Risky Ingestion, PPS = Planful Problem Solving, ME = Mental Escapism, D=Downplaying, A/A=Anger/Aggression, AE=Active Escapism, CP=Considering Perspective, LfH=Looking for (spiritual) Help.

Table C5

*Results From Multilevel (2-1-2) Mediation Models, with Change in **Social Loneliness** as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.*

	GN		**AN**		**MN**		**VN**	
	R^2	*p*	R^2	*p*	R^2	*p*	R^2	*p*
Model fit	**.185**	**.028**	**.199**	**.020**	**.205**	**.020**	**.169**	**.032**
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: Social Support	0.98	.15	0.38	.43	0.49	.47	-0.13	.10
M_2: RI	-0.01	.98	-0.38	.38	0.66	.22	**0.22**	**.001**
M_3: PPS	**1.47**	**.037**	**1.44**	**.006**	0.65	.34	**-0.24**	**.010**
M_4: ME	-1.16	.08	**-1.66**	**< .001**	-0.02	.98	**0.49**	**<.001**
M_5: D	**1.29**	**.036**	**0.96**	**.020**	0.95	.11	-0.09	.24
M_6: A/A	0.22	.68	-0.18	.65	0.68	.21	**0.20**	**.004**
M_7: AE	0.99	.13	0.91	.051	0.09	.88	**-0.15**	**.048**
M_8: CP	1.01	.08	0.61	.15	0.60	.31	-0.06	.42
M_9: LfH	**1.62**	**.007**	**0.98**	**.031**	**1.09**	**.046**	**-0.15**	**.022**
From mediator to outcome variable	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: Social Support	-0.07	.38	-0.07	.34	-0.07	.34	-0.06	.42
M_2: RI	0.01	.87	0.02	.83	0.02	.83	0.01	.92
M_3: PPS	-0.15	.16	-0.14	.17	-0.14	.17	-0.14	.18
M_4: ME	-0.11	.24	-0.14	.16	-0.13	.16	-0.13	.28
M_5: D	0.23	.054	**0.24**	**.042**	**0.24**	**.042**	0.20	.08
M_6: A/A	0.00	1.00	0.00	1.00	0.00	1.00	-0.02	.92
M_7: AE	0.11	.23	0.12	.23	0.12	.23	0.13	.19
M_8: CP	-0.20	.16	-0.20	.16	-0.20	.16	-0.21	.15
M_9: LfH	**0.17**	**.039**	**0.17**	**.028**	**0.17**	**.029**	0.15	.06
Indirect effects via mediator	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: Social Support	-0.06	.46	-0.03	.54	-0.04	.56	0.01	.50
M_2: RI	0.00	.98	-0.01	.83	0.01	.83	0.00	.92
M_3: PPS	-0.21	.27	-0.20	.24	-0.09	.46	0.04	.24
M_4: ME	0.13	.33	0.23	.18	0.00	.98	-0.06	.27
M_5: D	0.29	.18	0.23	.15	0.23	.23	-0.02	.34
M_6: A/A	0.00	1.00	0.00	1.00	0.00	1.00	0.00	.92
M_7: AE	0.11	.35	0.11	.32	0.01	.89	-0.02	.29
M_8: CP	-0.20	.26	-0.12	.30	-0.12	.41	0.01	.47
M_9: LfH	0.27	.09	0.17	.09	0.18	.14	-0.02	.17
Direct effects	*c'*	*p*	*c'*	*p*	*c'*	*p*	*c'*	*p*
narcissism to outcome variable	-0.81	.13	-0.63	.19	-0.43	.49	0.07	.38
Controlling for other type of narc			-0.41	.50	-0.54	.21		

Note: RI = Risky Ingestion, PPS = Planful Problem Solving, ME = Mental Escapism, D=Downplaying, A/A=Anger/Aggression, AE=Active Escapism, CP=Considering Perspective, LfH=Looking for (spiritual) Help.

Table C6

*Results From Multilevel (2-1-2) Mediation Models, with Change in **Emotional Loneliness** as Outcome Variable, and respectively Grandiose (left panel), Adaptive (middle left panel), Maladaptive (middle right panel), or Vulnerable Narcissism (right panel) as Predictor Variable.*

	GN		**AN**		**MN**		**VN**	
	R^2	*p*	R^2	*p*	R^2	*p*	R^2	*p*
Model fit	.145	.153	**.206**	**.035**	**.189**	**.040**	.151	.140
Direct effects								
From narcissism to mediator	*a*	*p*	*a*	*p*	*a*	*p*	*a*	*p*
M_1: Social Support	0.98	.15	0.38	.43	0.49	.47	-0.12	.10
M_2: RI	-0.01	.98	-0.38	.38	0.66	.22	**0.22**	**.001**
M_3: PPS	**1.47**	**.037**	**1.44**	**.005**	0.65	.35	**-0.24**	**.011**
M_4: ME	-1.16	.08	**-1.65**	**<.001**	-0.02	.98	**0.49**	**<.001**
M_5: D	**1.29**	**.036**	**0.96**	**.021**	0.95	.11	-0.09	.24
M_6: A/A	0.21	.69	-0.18	.64	0.68	.20	**0.20**	**.004**
M_7: AE	1.00	.13	**0.91**	**.050**	0.09	.89	**-0.15**	**.049**
M_8: CP	1.01	.08	0.61	.15	0.60	.31	-0.06	.44
M_9: LfH	**1.62**	**.007**	**0.98**	**.031**	**1.09**	**.045**	**-0.15**	**.023**
From mediator to outcome variable	*b*	*p*	*b*	*p*	*b*	*p*	*b*	*p*
M_1: Social Support	0.08	.51	0.06	.58	0.07	.58	0.08	.48
M_2: RI	0.01	.87	0.02	.77	0.02	.77	0.04	.89
M_3: PPS	-0.12	.36	-0.12	.32	-0.12	.32	-0.12	.35
M_4: ME	**-0.22**	**.043**	-0.16	.17	-0.16	.16	**-0.27**	**.038**
M_5: D	0.09	.43	0.08	.47	0.08	.46	0.09	.38
M_6: A/A	0.18	.17	0.20	.10	0.20	.10	0.17	.17
M_7: AE	-0.10	.32	-0.15	.13	-0.15	.13	-0.10	.37
M_8: CP	0.01	.95	0.00	.99	0.00	.99	0.02	.92
M_9: LfH	0.16	.07	**0.18**	**.041**	**0.18**	**.041**	**0.16**	**.040**
Indirect effects via mediator	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*	*a*b*	*p*
M_1: Social Support	0.08	.56	0.02	.66	0.03	.67	-0.01	.51
M_2: RI	0.00	.98	-0.01	.77	0.02	.78	0.00	.89
M_3: PPS	-0.17	.43	-0.18	.37	-0.08	.53	0.03	.38
M_4: ME	0.25	.19	0.27	.20	0.00	.98	**-0.13**	**.045**
M_5: D	0.11	.45	0.08	.48	0.08	.51	-0.01	.46
M_6: A/A	0.04	.68	-0.04	.67	0.14	.25	0.04	.24
M_7: AE	-0.10	.38	-0.14	.21	-0.01	.88	0.02	.44
M_8: CP	0.01	.95	0.00	.99	0.00	.99	0.00	.92
M_9: LfH	0.26	.12	0.18	.14	0.20	.15	-0.02	.14
Direct effects	*c'*	*p*	*c'*	*p*	*c'*	*p*	*c'*	*p*
narcissism to outcome variable	-0.08	.90	0.82	.19	-1.15	.14	0.07	.45
Controlling for other type of narc			-1.07	.17	0.85	.14		

Note: RI = Risky Ingestion, PPS = Planful Problem Solving, ME = Mental Escapism, D=Downplaying, A/A=Anger/Aggression, AE=Active Escapism, CP=Considering Perspective, LfH=Looking for (spiritual) Help.

Appendix D Study 3 – Pilot Studies

Study 3 – Pilot Studies

To develop the hypothetical stressors of Study 3, I read through all the stressful events participants provided in Studies 1 and 2. I discovered the overarching themes of agentic stressors: work-related problems; communal stressors: disagreement with partner or best friend; external stressors: sports team, road-rage, property issues.

After identifying these overarching themes, I developed a hypothetical stressful situation for each stressor that had to be generic enough that people could experience it, but specific enough that they all had to have similar stress-levels.

Pilot Study 1

In the first pilot study, I developed the following the three stressors as depicted in Table D1.

Table D1
Stressors Developed for Study 3 – Pilot Study 1

Stressor Type	Stressor
Agentic	Please imagine that you have been working for a particular company for the past 3 years. Since you have the most seniority at your position, you feel that you definitely deserve to be next in line for a promotion. Last week, your manager was considering promoting either you, or a fellow employee with 1 year's experience, to supervisor status. You find out today that your manager has decided to promote the less senior employee.
Communal	Please imagine that a close friend accompanies you to a party. When both of you arrive, however, your friend leaves you to go talk with his/her friends for the entire night. You do not know these friends, nor does your friend bother to introduce you. You don't know anyone else at the party. Unfortunately, you can not leave the party without your friend as they drove you to the party.
External	Please imagine that your home has been partially destroyed in a flood due to a burst pipe. A rapid response team were called to come and isolate the water supply. Some of your belongings have been destroyed and there is water damage throughout the property. As a result, you will have to move out temporarily. It will take a lot of time and effort to sort everything and repair the damage.

Appendix D – Study 3 – Pilot Studies

I recruited 73 participants, which were randomly allocated to rate one of three stressors: 21 in the agentic stressor condition, 26 in the communal condition, and 26 in the external stressor condition.

All participants rated to which extent they thought the stressor was caused by (1) having personal goals or accomplishments, (2) an interaction between themselves and another person/other people, and (3) something outside their control. They answered these questions from 1 (not at all) to 8 (very much so). Furthermore, I asked to

And if we examined the questions regarding whether or not people thought that they were caused by 'having personal goals or accomplishments', 'an interaction between yourself and another person/other people', of 'something outside your control'. We found the significant differences between the conditions, but not in the way we expected. Table D.2 displays the means of the questions in each group.

Table D2
Mean Scores of Stressors – Pilot Study 1

Stressor Type	Personal goals	Interaction with others	Something outside control
Agentic	4.90	5.05	5.48
Communal	2.46	4.62	5.69
External	1.69	1.58	7.42
Total	2.89	3.66	6.25

As can be seen in Table D2, people rate the agentic condition as mainly caused by something outside their control, then as caused by an interaction, and then as caused by personal goals or accomplishments. Besides, all stressors seem to score fairly high on 'caused by something outside your control'.

I ran ANOVAs to examine the differences in ratings between all conditions. These showed that the agentic question was rated significantly higher in the agentic condition ($M_{agentic} = 5.05$) compared to the other two conditions ($M_{communal} = 4.62$, $M_{external} = 1.58$); F

(2, 70) = 17.84, p < .001. The communual question was rated significantly lower in the external stressor condition ($M_{external}$ = 1.58), compared to both other conditions ($M_{agentic}$ = 5.05, $M_{communal}$ = 4.62); F (2, 70) = 22.82, p < .001. The external question was rated significantly higher in the external condition ($M_{external}$ = 7.42) compared to both other conditions ($M_{agentic}$ = 5.48, $M_{communal}$ = 5.68); F (2, 70) = 9.73, p <.001. However all three conditions scored relatively high on this question.

Even though the ANOVAs showed differences between the conditions, the agentic condition scored higher on the check asking for interactions than it scored on personal goals, therefore I decided to run another pilot study where I would ament the agentic stressor.

Pilot Study 2

In this pilot study I only tested a new agentic stressor: "Please imagine that you have a very tight deadline coming up at work, which you can not postpone. In order to complete the work you will have to work very long hours. As a result, you won't be able to fulfil other work obligations you had scheduled to complete, which will interfere with other upcoming deadlines."

I asked 17 participants to rate whether this stressor was caused by having personal goals or accomplishments, by an interaction with others, or something outside their control. As can be seen in Table D3 this stressor performed worse than the stressor in Pilot Study 1, no AVONAs were run to test this.

Table D3
Mean Scores of Stressors – Pilot Study 1

Stressor Type	Personal goals	Interaction with others	Something outside control
Agentic	3.82	4.41	5.82

Pilot Study 3

In this third pilot study I amended the stressors, and tested all three stressors again (see Table D4). I recruited 67 participants who were randomly allocated to rate the agentic stressor (*n*=20), the communal stressor (*n*=23), or the external stressor (*n*=24). The means of their answers in relationship to the ratings to which factor they contribute the stress are displayed in Table D5.

Table D4
Stressors Developed for Study 3 – Pilot Study 3

Stressor Type	Stressor
Agentic	Please imagine that you are very busy at work. Out of the blue you have been given a two week deadline to complete an additional task. It is important to meet this deadline. In order to complete the work you will have to work very long hours. You are not sure how you are going to complete this task in addition to all of your other work obligations, which also have tight deadlines. Despite your increased quantity of work it is very important that you don't let the quality suffer.
Communal	Please imagine that a close friend accompanies you to a party. When both of you arrive, however, your friend leaves you to go talk with his/her other friends for the entire night. You do not know these friends, nor does your friend bother to introduce you. You don't know anyone else at the party. Unfortunately, you can not leave the party without your friend as they drove you to the party. You are supposed to be going on holiday with this close friend in two weeks but you think this situation will have put a strain on your friendship
External	Please imagine that your home has been partially destroyed in a flood due to a burst pipe. A rapid response team were called to come and isolate the water supply. Some of your belongings have been destroyed and there is water damage throughout the property. As a result, you will have to move out for two weeks. It will take a lot of time and effort to sort everything and repair the damage.

Table D5
Mean Scores of Stressors – Pilot Study 3

	Caused by …		
Stressor Type	… personal goals?	… interaction with others	… something outside control
Agentic	3.30	2.25	6.60
Communal	3.04	4.22	5.83
External	1.42	1.42	7.50
Total	2.54	2.63	6.66

I ran ANOVAs to examine the differences between the three stressors. These showed that the agentic question was rated significantly higher in the agentic condition compared to the external condition, but not significantly higher than the communal condition; $F(2, 64) = 6.78$, $p = .002$. The communual question was rated significantly higher in the communal stressor condition compared to both other conditions; $F(2, 64) = 16.77$, $p < .001$. The external question was rated significantly higher in the external condition compared to both other conditions; $F(2, 64) = 8.94$, $p < .001$. However, all three conditions scored relatively high on this question.

Since these findings are trending towards what I expected, I decided to keep the stressors similar to this final pilot study, but slightly change the wording of the communal stressor (based on suggestions of participants), they mentioned that they would feel more stressful if "a friend invited them" instead of "a friend accompanied them".

Additionally, the wording of one of the questions was slightly amended to minimise possibility of confusion: Instead of "caused by struggling to meet personal goals or accomplishments" we are now using "caused by struggling to meet goals / tasks".

Finally, checks were carried out to see how stressful, upsetting, controllable, and threatening the situations were, and how confident participants were in dealing with the situation (means are displayed in Table D).

Table D6
Mean Scores of Stressors – Pilot Study 3

Stressor Type	Stressful	Upsetting	Confident	Controllable	Threatening
Agentic	6.85	6.00	4.30	4.40	4.85
Communal	5.30	5.43	4.70	4.96	3.61
External	6.58	6.71	4.04	4.29	3.54
Total	6.22	6.06	4.34	4.55	3.96

ANOVAs confirmed that the communal stressor is perceived as less stressful and less upsetting then both other stressors. However, all conditions score above the midpoint of the scale, and I assume these differences will disappear with the changes suggested above. There were no significant differences in confidence in dealing with the stressor, controllability, and threateningness of the situation.

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