

University of Southampton Research Repository ePrints Soton

Copyright © and Moral Rights for this thesis are retained by the author and/or other copyright owners. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder/s. The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given e.g.

AUTHOR (year of submission) "Full thesis title", University of Southampton, name of the University School or Department, PhD Thesis, pagination

UNIVERSITY OF SOUTHAMPTON

FACULTY OF SOCIAL & HUMAN SCIENCES

School of Psychology

Examining the relationship between sources of self-concept and forms of aggression in adolescence

by

Cora Castielle Sargeant

Thesis for the degree of Doctor of Educational Psychology

June 2013

Overall Word Count: 17792

Literature Review Word Count: 8099

Empirical Paper Word Count: 9693

UNIVERSITY OF SOUTHAMPTON

ABSTRACT

FACULTY OF SOCIAL & HUMAN SCIENCES

School of Psychology

Doctor of Educational Psychology

EXAMINING THE RELATIONSHIP BETWEEN FORMS OF SELF-CONCEPT
AND FORMS OF AGGRESSION IN ADOLESCENCE

by Cora Castielle Sargeant

This thesis investigates the relationship between forms of self-concept and forms of aggression in adolescence. The relationship between self-esteem and aggression has been inconsistent in research, with both high and low self-esteem found to be related to aggression. The first paper presented here reviews the literature in the field and finds that this relationship becomes clearer when self-esteem is conceptualised in terms of a dual processing model, consisting of both explicit and implicit forms. The relationship with aggression is strongest when high explicit self-esteem is combined with low implicit self-esteem, as it is in narcissism. The literature review demonstrates that because of this, narcissism provides a better predictor of forms of aggression than the dual processing model of self-esteem can alone. Implications for future research and educational practice are discussed, with a particular emphasis on the need for future research to investigate the emerging link between narcissism and bullying.

The second paper presented here reports an empirical study investigating the relationship between adaptive (i.e., leadership, self-sufficiency) and maladaptive (i.e., the tendency to exploit others, exhibitionism, entitlement) forms of narcissism and bullying as well as the possible mechanisms through which they are related. We surveyed 388 UK adolescents (160 boys, 190 girls) using measures of narcissism, bullying behaviour, affective and cognitive empathy, and need for power. Results highlighted that both adaptive and maladaptive

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

narcissism were predictive of bullying for both male and female participants. We found that this relationship was not mediated by either cognitive or affective empathy, but that it was significantly mediated by a need for power. The study highlights the need for future research to begin to design and test interventions targeting the bullying associated with different forms of narcissism individually.

Contents

Abstract..... p1

Contents p3

List of Tables..... p4

List of Figures p5

Author’s Declaration..... p6

Acknowledgements..... p7

Abbreviations p8

Chapter 1: Literature Review p9

Chapter 2: Empirical Paper..... p37

Appendices p69

List of References p87

List of Tables

Table 1. Descriptive Statistics for Measured Variables p53
Table 2. Correlation Matrix..... p54

List of Figures

- Figure 1. Flow chart depicting stages of literature scrutiny and exclusion p16
- Figure 2. Bootstrapped regression analyses for adaptive narcissism p56
- Figure 3. Bootstrapped regression analyses for maladaptive narcissism p58

DECLARATION OF AUTHORSHIP

I, Cora Sargeant, declare that the thesis entitled 'Examining the relationship between forms of self-concept and forms of aggression in adolescence' and the work presented in the thesis are both my own, and have been generated by me as the result of my own original research. I confirm that:

- this work was done wholly while in candidature for a research degree at this University;
- 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;
- where I have consulted the published work of others, this is always clearly attributed;
- 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;
- I have acknowledged all main sources of help;
- 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;
- none of this work has been published before submission

Signed:

Date:.....06/06/2013.....

Acknowledgements

I would like to thank Dr Claire Hart, Dr Erica Hepper, and Professor Constantine Sedikides for their support in the inception, development, analysis, and reporting of this research. I look forward to working together again in the future.

I would like to thank the trainees on my course, who have been a constant source of support over the past three years. I would like to give particular thanks to Rebecca Murphy for taking the time to read and critique my work prior to submission.

Finally, I would like to thank my wife, Caroline; you have brought grounding in times of drama, levity in times of concern, and freedom in times of duress, I could not have done this without you.

Abbreviations

CNS	Children's Narcissism Scale
IRI	Interpersonal Reactivity Index
NPIC	Narcissistic Personality Inventory for Children
RSE	Rosenberg Self-Esteem scale

Chapter 1

Investigating the relationship between aggression, self-esteem, and narcissism: can narcissism explain incongruences between self-esteem and aggression?

Background and Aims

Interpersonal aggression encompasses two forms: proactive and reactive. Proactive aggression is often unprovoked and intentional, aimed at securing some personal gain or to dominate or coerce others (Dodge & Coie, 1987; Egan & Lewis, 2011). Reactive aggression is less predatory, representing an effort to defend oneself against a perceived physical or emotional threat (Kerig & Stellwagen, 2010). Forms of aggression are prevalent in UK schools and the consequences for victims of that aggression are severe, particularly when that aggression is repeated over time and in a relationship where there is an imbalance of power. Bullying is a term used to describe this particular form of repeated proactive aggression (Olweus, 1978). A recent survey of 250,000 children found that nearly half of the 6-10 year olds had been the victims of bullying, and just under half of these children had been bullied at least weekly (Chamberlain, George, Golden, Walker, & Benton, 2010). Another survey found that around 12% of children suffered bullying on a regular basis and 22% of those children had been bullied for over a year (Smith & Shu, 2000). Only around 60% of young people consider social exclusion to be a form of bullying (Boulton, Bucci, & Hawker, 1999; Smith, et al., 2002), though it has been shown to have consequences for victims similar to physical bullying (Dukes, Stein, & Zane, 2009; Riva, Wirth, & Williams, 2011). Thus because the large-scale surveys relied on self report measures, the actual prevalence of bullying in UK schools might be much higher than previously estimated.

Being a victim of bullying has been shown to be related to poorer psychological adjustment, including lower self-worth, and greater loneliness and depressive symptoms (Juvonen, Nishina, & Graham, 2000). These symptoms have been shown to persist in the long term, and being bullied has been shown to contribute independently to children's long-term mental health problems

(Arseneault, Bowes, & Shakoor, 2010) including increasing their risk of depression (Ttofi, Farrington, Lösel, & Loeber, 2011) and suicide (Klomek, Sourander, & Gould, 2010). These problems can even be life-long; a survey of 7000 people aged 16 and over in England found that adults that had been bullied in childhood were more than twice as likely to attempt suicide in later life Meltzer, Vostanis, Ford, Bebbington, & Dennis (2011). Being the victim of bullying has also been shown to have educational implications as it predicts reduced classroom participation and school attendance (Buhs, Ladd, & Herald, 2006) and poorer academic performance (Juvonen, et al., 2000; Schwartz, Gorman, Nakamoto, & Toblin, 2005). Given the severe consequences of aggression and bullying it will be important to better understand the causes of these behaviours.

A large amount of research has focussed on understanding the causes of aggression in children and young people with a particular focus on the individual difference variables that might predict it. One of these individual differences is empathy, which has been shown to be inversely related to the propensity to bully (Chaux, Molano & Podlesky, 2009; Nickerson, Mele, & Princiotta, 2008; Nordgren, Banas, & MacDonald, 2011). Recent research has divided empathy into two related constructs; cognitive empathy and affective empathy (Jolliffe & Farrington, 2006, 2011). This research has shown that affective empathy, the tendency to feel what another person is feeling, is more strongly related to low aggression than is cognitive empathy, the ability to know what another person is feeling (Jolliffe & Farrington, 2006, 2011). A number of other individual differences have also been connected to aggression including low sense of belonging (Oluyinka, 2008), high impulsivity (Jolliffe & Farrington, 2011), callous-unemotional traits (Muñoz, Qualter, & Padgett, 2011), and narcissism (Kerig & Stellwagen, 2010). Though research has been able to understand many of the individual differences associated with aggression, research has struggled to understand the relationship between aggression and one key individual difference: self-esteem.

One of the consequences researchers had found to be associated with low self-esteem (i.e. the perception of one's personal worth or worthiness, Rosenberg,

1965) was interpersonal aggression (e.g. Kirschner, 1992; Long, 1990). However, this view was later challenged by Baumeister, Smart, & Boden (1996) in a large-scale meta-analysis that claimed that the opposite was true, that very high self-esteem resulted in aggression. Baumeister and colleagues considered that high self-esteem was not a homogenous category and that when high self-esteem was vulnerable or unstable people were motivated to defend it aggressively (Bushman & Baumeister, 1998). Baumeister, et al., (1996) termed this relationship between vulnerable high self-esteem and aggression a response to threatened egoism. Baumeister and colleagues have since claimed theories linking low self-esteem and aggression to be indefensible (Baumeister, Bushman & Campbell, 2000). However, the relationship between unilateral constructs of self-esteem and aggression continues to be contentious with recent research finding both high self-esteem and low self-esteem to be related to forms of aggression in childhood and adolescence (e.g. Golmaryami & Barry, 2010; Lau, Marsee, Kunimatsu, & Fassnacht, 2011; Seals & Young, 2003; Wallace, Barry, Zeigler-Hill, & Green, 2012).

One of the main criticisms of research investigating the relationship between self-esteem and aggression is that they often considered self-esteem to be a broadly unilateral construct and that the vulnerability of high self-esteem (and its consequent association with aggression) was determined by the extent to which it was inflated or unrealistic (Bushman & Baumeister, 1998). Dual processing models, however, demonstrate that there can be explicit and implicit processing of information simultaneously, the latter being entirely outside of conscious awareness (Greenwald & Banaji, 1995). Recent research has even shown that implicit self-esteem (i.e. the implicit and unconscious association between internal concepts of self and valence attributes) can predict behaviours independent of explicit self-esteem (Greenwald, Poehlman, Uhlman, & Banaji, 2009). Rather than unrealistically positive self-views creating vulnerable high self-esteem, which as a view is contingent on the existence of a person's objective worth, it seems more plausible that an internal dissonance between implicit and explicit forms of self-

esteem generates the vulnerability associated with threatened egoism. Thus it is possible that both the high self-esteem and low self-esteem theories of aggression can be seen to be correct, because an individual can have forms of both high self-esteem and low self-esteem simultaneously. Accordingly, the primary aim of the present review is to consider the contention between unilateral constructs of self-esteem and forms of aggression, including bullying, and determine the extent to which this contention can be resolved by conceptualising self-esteem in terms of a dual processing model.

The relationship between forms of aggression and a dual processing model of self-esteem may be further examined and explained using models of narcissism. Narcissists hold an inflated sense of self, a strong agentic self-focus and a weak communal focus. Narcissism can be divided into adaptive and maladaptive forms (though these are positively related). Adaptive narcissists hold positive traits such as self-confidence, assertiveness, self-sufficiency, and tend to be strong leaders (see Twenge & Foster, 2008). Maladaptive narcissists have a greater sense of entitlement, exhibitionism, and a propensity to exploit others (Barry, Frick, Adler, & Grafeman, 2007; Raskin & Terry, 1988). The self-regulatory model of narcissism describes self-regulatory strategies that narcissists depend on to maintain their inflated sense of self (Morf & Rhodewalt, 2001). These strategies include admiration seeking, bragging, displaying material possessions, making efforts to look good and to be noticed, and making efforts to visibly surpass others. These strategies can be anti-social in nature and narcissism has been associated with forms of aggression consistently in research (Barry, Grafeman, Adler, & Pickard, 2007; Bukowski, Schwartzman, Santo, Bagwell, & Adams, 2009; Fossati, Borroni, Eisenberg, and Maffei, 2010; Marsee, Silverthorn, & Frick, 2005; Ojanen, Findley, & Fuller, 2012; Onishi, Kawabata, Kurokawa, & Yoshida, 2012). In a similar way to unilateral conceptualisations of vulnerable high self-esteem, however, the inflated self-views associated with narcissism can be seen as describing a cognitive dissonance between high explicit (conscious) self-esteem and low implicit (unconscious) self-esteem (Campbell, Bosson, Goheen, Lakey, & Kernis, 2007).

Thus many of the behavioural features of narcissism represent the mechanisms through which narcissistic individuals struggle to maintain an inflated sense of self in the face of a contradictory and unconscious implicit self-belief. With that frame in mind, it is possible that narcissism can help to further explain the contentious relationship between aggression and self-esteem in research.

Narcissism as a personality trait can also be conceptualised in terms of an agentic self-focus (e.g., a sense of being special or different, and an orientation toward personal success) coupled with a lack of communion (e.g., few communal traits such as warmth, feeling concern for others, and morality, low interest in communal traits, a selfish nature) (Paulhus, 2001). These features are best described by the agency model of narcissism (Campbell & Foster, 2007), which highlights the agentic self-focus of narcissism as a core feature of the trait. The lack of a communal focus has been linked to low affective empathy in narcissists (Vonk, Zeigler-Hill, Mayhew, & Mercer, 2012; Wai & Tiliopoulos, 2012). Low affective empathy, in turn, has been connected to increased levels of bullying (e.g. Gini, Albiero, Benelli, & Altoe, 2007)

The combination of self-regulatory and agentic models of narcissism encompass and extend the research on the diadic model of self-esteem. Given this, in this literature review the second aim is to examine the relationship between narcissism and aggression. I aim to ascertain the extent to which narcissism, conceptualised as encompassing a dissonance between explicit and implicit self esteem, serves as a more useful construct that better explains the relationship between self-esteem and aggression than the dual processing model of self-esteem alone.

Methodology

The literature search took place through two main databases 'PsychINFO' and the 'Web of Science'. Though other databases were searched, none returned results that had not already been accounted for in the first two searches. These searches were conducted independent of one another on 3rd December 2012. In

order to capture all of the studies relating to aggression, the search terms 'proactive aggression', 'reactive aggression', 'physical aggression', 'relational aggression', and 'verbal aggression' were used together. The term 'bullying' was also included to capture those studies relating to this particular form of proactive aggression. The term 'victimisation' was not used because this captured studies investigating the victims of bullying, which was not the focus of the present review. In order to capture all those studies relating to self-esteem or narcissism terms 'narcissism', 'self-esteem' and 'self-worth' were used. The term 'self-concept' and 'self-efficacy' were not used as these returned articles that investigated domain-specific forms of self-concept, which were not the focus of the present review. Only peer-reviewed articles and those that used an adolescent sample (13-17 years) were included in the search from PsychINFO. Due to the large number of research articles from the field of medicine in the Web of Science, only articles published in the field of psychology were included in the search from this database. The different search criteria were due to differences in the search criteria permitted by each search engine. However, later stages of analysis ensured that articles that might have made it through the initial searches were excluded if they were not peer reviewed, if they did not include a sample of adolescents, or if they were not published in the field of psychology.

The titles of the remaining articles from both searches were reviewed, and then their abstracts were reviewed before scrutinising each of the papers more closely. Articles were removed at the last stage of scrutiny if they were published more than ten years ago or published in a foreign language. Articles were also removed if they did not analyse data from an adolescent sample or if their sample included adolescents but they did not separate their data from the main sample for analysis. Finally, articles were removed if they investigated an area outside of the scope of the present review. These articles included those that focussed exclusively on cyber bullying (online forms of bullying), those that focussed exclusively on the outcomes of interventions, and those that focussed on the

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

qualitative analysis of young people's own accounts of bullying. Those papers excluded at each stage of the analysis are detailed in a flow chart (see Figure 1).

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

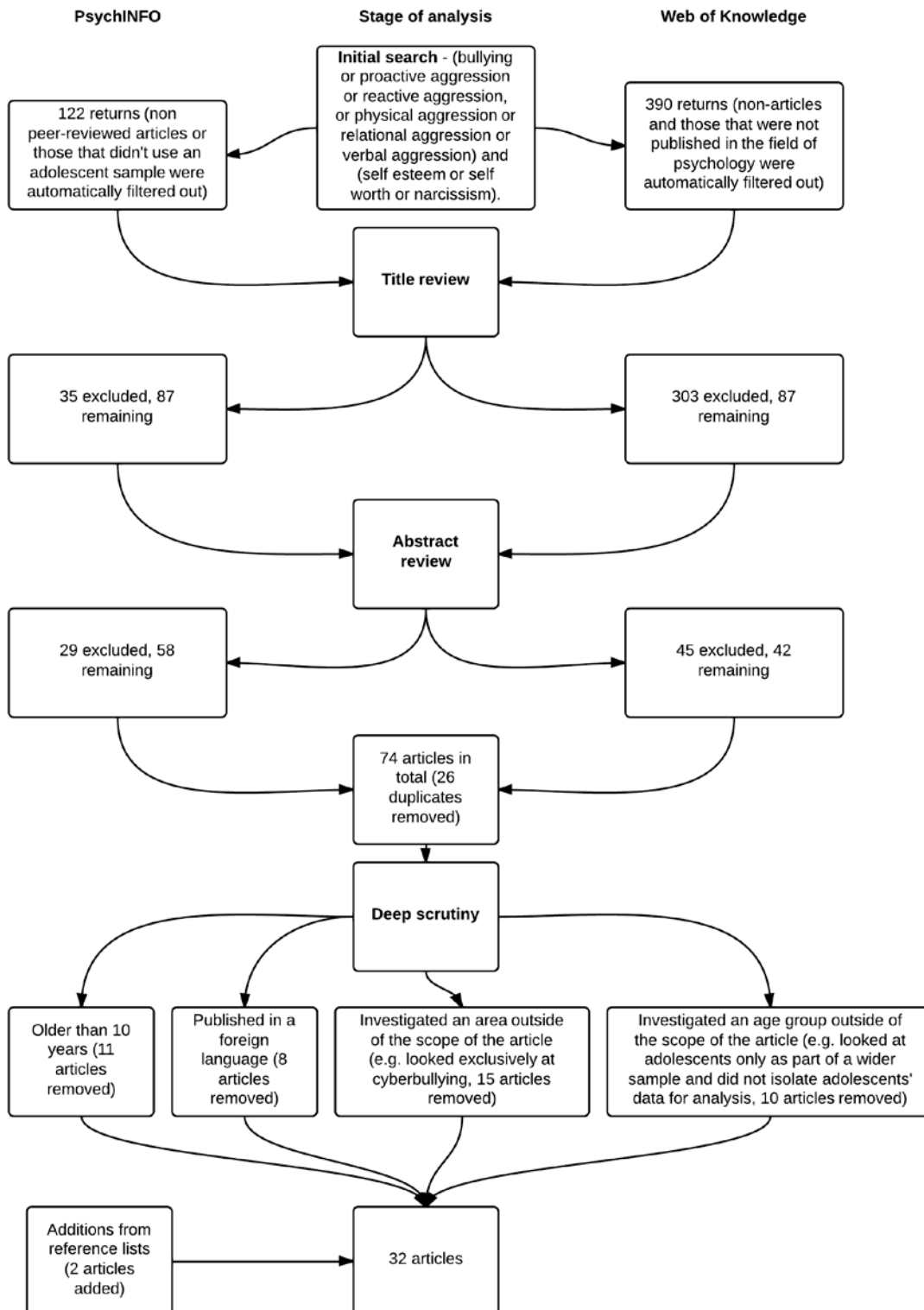


Figure 1. Flow chart depicting stages of literature scrutiny and exclusion

Introduction

Following scrutiny of the literature 32 articles formed the literature base for the present review. This review will demonstrate that recent research has continued to find an inconsistent pattern of results in the relationship between aggression and self-esteem. Recently, two studies found a relationship between self-esteem and aggression (Golmaryami & Barry, 2010; Seals & Young, 2003); six studies identified an inverse relationship (Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005; Lau, et al., 2011; Marini, Dane, Bosacki, & Ylc, 2006; Pollastri, Cardemil, & O'Donnell, 2010; Wallace, et al., 2012; Ybrandt & Armelius, 2010), and four studies found no relationship between the two variables (Barry, et al., 2007; Barry, Pickard, & Ansel, 2009; Dukes, et al., 2009; Estevez, Murgui, & Musitu, 2009). Each will be reviewed in turn.

In the present literature review I found three possible explanations for the aforementioned inconsistencies. First, the studies that found an inverse relationship between self-esteem and aggression used self-report measures of aggression, while many of those that did not find such a relationship either did not use self-report measures or supplemented those with peer-nominated measures. Second, many of the studies that found a relationship between low self-esteem and aggression did not control for victimisation. The final possible explanation that I will identify in the present literature review is that the referenced studies investigating the relationship between aggression and self-esteem considered the latter as a unilateral construct ranging from high to low. However, self-esteem can also be considered as a dual processing model with implicit (unconscious) and explicit (conscious) forms (Greenwald and Banagi, 1995).

I will go on to argue that narcissism, conceptualised as encompassing a combination of low implicit and high explicit self-esteem, is a more useful variable in predicting aggression in adolescence than self-esteem. The reviewed research suggests that narcissism is able to more consistently predict reactive aggression than self-esteem is able to, and that unlike self-esteem alone, narcissism is able to

predict proactive aggression in adolescence. The most recent research suggests that the predictive ability of narcissism may even extend to bullying, which is arguably one of the most common and harmful forms of proactive aggression. From a review of this literature the present review highlights important implications for future research and for educational practice.

The Relationship between Aggression and High Self-esteem

Two recent studies have found a relationship between aggression and high self-esteem in adolescents. Golmaryami and Barry (2010) conducted a survey of 43 adolescents that had withdrawn from school and were enrolled on a residential intervention program. Golmaryami and Barry (2010) used the peer conflict scale, originally devised by Marsee, Kimonis, & Frick (2004), to determine participants' levels of aggression and supplemented this with a peer-nomination measure developed by Crick and Grotpeter (1995). The researchers recruited the widely used Rosenberg Self-Esteem scale (RSE) to measure participants' self-esteem. Though their participants' self-reported levels of aggression were not significantly correlated with their self-esteem, Golmaryami and Barry found that there was a significant correlation between self-esteem and peer-nominated relational aggression. Those with high self-esteem, though they did not report it themselves, were more likely to be seen by their peers as relationally aggressive. Though Golmaryami and Barry had only a small sample, Seals and Young (2003) used a much larger sample and found a similar result. Seals and Young used the Peer Relations Questionnaire (Rigby & Slee, 1995) to measure aggression in 454 seventh and eighth grade students, and compared aggressors and non-aggressors on their scores on the RSE. Though their results were not statistically significant, Seals and Young, like Golmaryami and Barry, found that aggressors had higher levels of self-esteem than those that did not engage in such behaviour.

The Relationship between Aggression and Low Self-esteem

Though a number of researchers have found high self-esteem to be related to aggression, many researchers have found the converse to be true, and some of these studies are directly comparable to those aforementioned. One such study conducted by Lau et al. (2011) measured self-esteem (using the RSE) and different forms of aggression (using the peer conflict scale) in a sample of adolescents. While using these same measures Golmaryami and Barry (2010) found no correlation between relational aggression and self-esteem, Lau et al. found a significant inverse correlation between self-esteem and overt and relational aggression. Though one possibility for this difference is that Golmaryami and Barry (2010) used a sample of adolescents who were enrolled in a residential program for youth who had dropped out of school, another study used a very similar sample and still found very different results. Wallace et al. (2012) invited 174 adolescents from such a residential program to complete the peer conflict scale and the RSE and identified a significant inverse correlation between self-esteem and both proactive and reactive aggression. The relationship between aggression and low self-esteem in adolescents has also been shown to remain when different measures of these variables are used (Ybrandt & Armelius, 2010) and once the quality of peer and parent relationships, IQ, and socio-economic status have been taken into account (Donnellan, et al., 2005).

Pollastri et al. (2010) compared bullies' and non-bullies' levels of self-esteem and found the opposite to the methodologically comparable study conducted by Seals and Young (2003); bullies had significantly lower self-esteem than their non-bully counterparts. In addition, Marini et al, (2006) gave a battery of questionnaires, including the RSE and a bullying behaviour checklist, to 7,290 Canadian adolescents. Though they found that victims of aggression had lower self-esteem than aggressors, Marini, et al. also found that aggressors had lower self-esteem than non-involved individuals.

Studies that Found no Relationship between Aggression and Self-esteem

A third group of studies found no relationship between self-esteem and aggression in adolescence. Barry et al. (2007) surveyed American adolescents that had enrolled in a military-style intervention for young people that had dropped out of school. The researchers found no significant correlation between self-esteem and direct or indirect aggression, both measured by self-report. These findings were replicated in a later study using a similar sample (Barry, et al., 2009). In a large-scale study Dukes, et al., (2009) used a measure devised by Crick and Grotpeter (1995) to divide a sample of 2,724 adolescents in Colorado into bullies, non-involved, victims, and bully-victims (those that can be considered both bullies and victims). Dukes, et al. then compared these groups on a number of measures, including self-esteem. The authors found that the self-esteem of bullies and non-involved adolescents was not significantly different, indeed they were very similar. Finally, Estevez, et al. (2009) measured the aggression (via the School Violence Scale, adapted from Little, Jones, Henrich, & Hawley, 2003) and self-esteem (using the RSE) of 1,319 Spanish adolescents. Estevez, et al. found that aggressive adolescents had comparable global self-esteem to those that were not involved in peer aggression.

Explaining the Contradiction

There are three possible explanations for these apparently contradictory findings. The first is that the studies that found an inverse relationship between self-esteem and aggression used self-report measures of aggression, while some that found the inverse to be true, such as Golmaryami and Barry (2010), used peer-nominated measures. Thomaes, Stegge, & Olthof (2007) used both peer-nominated and self-report measures of aggression simultaneously with young adolescents and found that self-worth was only inversely correlated with aggression measured by self-report, not by peer report. Additionally, Thomaes et al. found that self-worth was not correlated with aggression measured by participants' reactions to vignettes. Thus it is possible that Wallace et al. (2012)

and Lau et al. (2011) found an inverse correlation between participants' self-esteem and their perceived aggressiveness, rather than their levels of aggressive behaviour. In addition, Strohmeier, Spiel and Gradinger (2008) divided their sample of 280 Australian adolescents into bullies and non-involved individuals using peer nomination methods. When they compared these groups on their levels of self-esteem (measured by the self-description questionnaire, Marsh, 1990) the authors found no significant difference. However, Thomaes et al. (2007) only measured reactive forms of aggression, and Strohmeier et al. (2008) only measured peer-reported bullying, and considered an individual to be part of the bully group on the basis of a single peer nomination. As such more research is needed to ascertain the extent to which self-esteem influences adolescents' perceptions of their own aggressiveness independent of their levels of aggressive behaviour.

The second possible explanation is that many of the studies that found a relationship between low self-esteem and aggression did not control for victimisation (e.g. Donnellan, et al., 2005; Lau, et al., 2011; Wallace, et al., 2012). In their study, Kokkinos and Panayiotou (2004) gave a bullying and victimisation questionnaire and a general self-worth questionnaire to young adolescents in Cyprus as part of a wider study. Kokkinos and Panayiotou measured participants' bullying behaviour using their own questionnaire, and self-esteem using a global self-worth scale. When they correlated these measures they found a significant inverse relationship between self-esteem and bullying. However, using the bullying and victimisation questionnaire, the authors then divided their sample into bullies, victims, bully/victims, and non-involved individuals. Having done this, the authors found no significant difference in self-esteem between bullies and non-involved individuals. Their original finding had been due to the very low self-esteem of bully/victims. However, when Pollastri et al. (2010) divided their data in the same way, they still found pure bullies to have significantly lower self-esteem than non-involved individuals. Thus the effect of victimisation may not sufficiently

explain the seemingly paradoxical findings that both low and high self-esteem have been found to be related to aggression.

The third possible explanation is that all of the aforementioned studies treated self-esteem as a unilateral construct that ranges from high to low. However the dual process model represents self-esteem as comprised of two distinct routes of processing: one explicit and the other implicit (Greenwald & Banaji, 1995). It is this latter, more conscious frame that is most often captured by self-report measures including the RSE (Rosenberg, 1965). Greenwald and Farnham (2000) confirmed with adults that the RSE consistently captures explicit rather than implicit self-esteem and created a method for measuring implicit self-esteem called the Implicit Association Test, which measures the strength of association an individual has between self-concepts and valence attributes.

Using the implicit association test and the RSE, Sandstrom and Jordan (2008) measured both implicit and explicit self-esteem in 93 young adolescents in Massachusetts and used a regression analysis to predict levels of teacher rated relational and physical aggression. The authors found no direct effects for either implicit or explicit self-esteem on physical or relational aggression. However, they identified interaction effects such that explicit self-esteem was significantly positively associated with both physical and relational aggression, but only for those young people with low implicit self-esteem. For those with high implicit self-esteem, there was a non-significant negative relationship between explicit self-esteem and both relational and physical aggression. Thus it is possible that implicit self-esteem was a confounding variable in much of the previous research, which looked exclusively at explicit self-esteem.

The dual-processing model of self-esteem represents the most promising explanation of why previous research has found such contradictory findings. Sandstrom and Jordan (2008) described the combination of high explicit and low implicit self-esteem as defensive self-esteem. Sandstrom and Jordan also found that the highest levels of aggression could be found in those young people with

this defensive self-esteem. They considered that the presence of low implicit self-esteem made the high explicit self-esteem vulnerable to being disputed or undermined. Baumeister et al. (1996) considered that the possibility of such attacks left these individuals in a state of 'threatened egoism' and thought that reactive aggression was a method through which these disputations could be discounted and threatened egos protected. Thus the relationship between aggression and self-esteem may represent a relationship between an inflated and vulnerable explicit self-esteem, and the anti-social strategies used to maintain it. The relationship between defensive self-esteem and anti-social self-regulatory strategies has been well documented in the narcissism literature (Barry, et al., 2007; Bukowski, et al., 2009; Fossati, et al., 2010; Marsee, et al., 2005; Ojanen, et al., 2012; Onishi, et al., 2012). As such it is possible that, though aforementioned studies have highlighted the role of self-constructs as important in understanding aggression, it may be that narcissism as a self-construct is a more useful predictor of aggression than self-esteem has been able to be.

The Relationship between Narcissism and Reactive Aggression

Morf and Rhodewalt (2001) describe a central aspect of narcissism as a grandiose but fragile self-image, one that paradoxically involves both low implicit self-esteem and high explicit self-esteem (Zeigler-hill, 2006). The fragility of this self-image makes it vulnerable to attack, and thus a relationship between narcissism and reactive forms of aggression is predicted by Baumeister et al.'s (1996) threatened egoism theory.

Narcissism has been shown to predict adolescent reactive aggression much more consistently than self-esteem has been. Barry et al. (2007) measured the relationship between narcissism (using the Narcissistic Personality Inventory for Children, NPIC), self-esteem, and aggression (using the peer conflict scale) in adolescents enrolled in a military-style intervention for young people that had dropped out of school. Though Barry et al. found no significant correlation between self-esteem and forms of aggression, they did find a relationship between

narcissism and both overt and relational forms of aggression. They found that narcissism was able to predict 33% of the variance in overt aggression and, together with self-esteem narcissism was able to predict 33% of the variance in relational aggression. At each stage of the analysis narcissism proved to be a better predictor of aggression than self-esteem proved to be. In a more recent study, Fossati, et al. (2010) found that narcissism (measured using the Narcissistic Personality Inventory, NPI) was associated with both proactive and reactive aggression (measured using the reactive-proactive questionnaire, Raine et al, 2006). Additionally, the authors found that two of the subscales of the NPI usually associated with maladaptive forms of narcissism, exhibitionism and entitlement, were exclusively related to reactive rather than proactive aggression

One criticism that can be levelled at these studies is that they used self-report measures of both narcissism and aggression. It has already been established that using self-report measures of aggression can determine levels of perceived aggression and that these can be quite different to levels of aggressive behaviour as observed by peers or measured by responses to vignettes (e.g. Golmaryami & Barry, 2010; Thomaes, et al., 2007). However, a number of studies have supplemented self-report measures of aggression and narcissism with other types of measure and have found a relationship between these variables (e.g. Bukowski, et al., 2009; Marsee, et al., 2005; Ojanen, et al., 2012).

Three studies used peer or teacher report measures of narcissism or aggression in their assessment of the relationship between the two variables. Bukowski et al. (2009) conducted a study in Quebec with three separate samples of adolescents. Bukowski et al. used a peer-rated measure of narcissism. However, the measure they used was only 2 items long, describing superior and self-focussed aspects of narcissism, which fails to capture all of the features of narcissism as a personality trait. Nonetheless, the authors found a significant relationship between levels of narcissism and both physical and relational aggression, and both proactive and reactive aggression, with a stronger relationship between narcissism and reactive aggression. Ojanen et al. (2012)

also used a peer-nomination measure of aggression and found a relationship between this and self-reported narcissism in adolescents. Finally, Marsee et al. (2005) sampled adolescents from United States public schools and invited them to complete a measure of aggression and their teachers to complete a measure of narcissism (using a subscale of the antisocial process screening device, Frick & Hare, 2001). Marsee et al. found that teacher-reported levels of narcissism predicted levels of both overt and relational aggression.

The aforementioned studies showed that narcissism was related to reactive aggression when the variables were measured by either self-report or peer-report. However, two additional studies show that narcissism and aggression are related using methods that have even greater ecological validity. Onishi et al. (2012) gave Japanese adolescents 12 vignettes describing episodes of relational aggression and asked whether, if they were present during the event, they would join in with the aggression. Onishi et al. then compared their answers with self-reported levels of narcissism measured using a Japanese form of an adapted version of the NPI. The researchers found that relational aggression was related to levels of narcissism. Additionally, the researchers found that narcissistic rage had a particularly strong relationship with levels of relational aggression in situations depicting its recruitment as a form of punishment for some slight. Thomaes, Bushman, Stegge, and Olthof (2008) invited young adolescents to play a game called 'Fastkid!' where they competed with a fake online opponent to see who had the fastest reaction time. After the first game the fake opponent sent a message to the participant. In the shame condition participants were set up to lose against an opponent that they knew to be at the bottom of the scoreboard (and therefore not good at the game), who then shamed them in their message after the first game. In the control condition the participant did not know the skill level of their opponent and were sent a neutral message. After the second game, the participant had the opportunity to blast aversive noise at their opponent with the choice of the volume at which the noise should be broadcast. Thomaes et al. found that shamed participants were more aggressive toward their opponents

(played louder blasts of noise) than controls, but only if they were also narcissistic, with higher levels of narcissism being associated with greater shame-induced aggression.

The Relationship between Narcissism and Proactive Aggression

Narcissism may be a more important variable to consider in relation to aggression than self-esteem not only because it is able to predict reactive aggression more consistently but because it is also able to predict proactive forms of aggression. Though the narcissistic self-image is vulnerable to being externally undermined, its paradoxical nature consisting of both high explicit and low implicit self-esteem means that it is also vulnerable to being internally undermined. As such, even in the absence of threat, the narcissistic self-image relies upon a number of interpersonal self-regulatory strategies to maintain. In their seminal paper Morf and Rhodewalt (2001) state that narcissists depend on social approval and the admiration of others to maintain their inflated sense of self and that they must continually 'ask' others for these using a variety of interpersonal behaviours. Morf and Rhodewalt (2001) believe that these behaviours are designed to elicit admiration and social approval, but often do not succeed in this aim, sometimes eliciting the opposite response. The more persistent threat to the inflated narcissistic self-image is from within, however, and as such the interpersonal behaviours deployed by narcissists are designed as much to construct and present a grandiose self-image back to the self, as they are to present one to other people. Thus proactive aggression, which is a demonstration of power and dominance over another person, can serve to feed back a grandiose self-image as well as perhaps to elicit responses of fear or admiration from their audience.

A number of studies have also found a connection between narcissism and proactive aggression. Kerig and Stellwagen (2010) invited adolescents to complete the antisocial process screening device to measure their callous-unemotional traits, impulsivity, and narcissism. The researchers then asked the

teachers of those adolescents to complete the children's social experiences scale (Crick & Grotpeter, 1996) and the scale of proactive-reactive aggression (Dodge & Coie, 1987) in order to measure the adolescents' physical and relational aggression and their proactive and reactive aggression respectively. Kerig and Stellwagen conducted multiple regression analyses to determine the extent to which forms of aggression could be predicted by narcissism, impulsivity, and callous-unemotional traits. The authors found that this model was a statistically significant predictor of both proactive and reactive aggression, with narcissism a stronger predictor than the other two variables. Kerig and Stellwagen also found that, alongside impulsivity and callous-unemotional traits, narcissism was able to predict more of the variance in proactive aggression (12.3%) than in reactive aggression (4.2%).

In a very recent study, Wallace et al. (2012) compared self-report measures of narcissism, self-esteem, and aggression in older adolescents enrolled in a residential programme for those who had dropped out of school. Wallace et al. found that narcissism was significantly correlated with proactive aggression but not reactive aggression, while self-esteem was negatively correlated with both. Washburn et al. (2004) conducted a study with young adolescents from three public schools in Chicago. Washburn et al. found that exploitative narcissism (a feature of maladaptive narcissism) was associated with self-reported proactive aggression but not with self-reported reactive aggression. Finally, Seah and Ang (2008) found that proactive aggression was more highly correlated with narcissism than reactive aggression in Singaporean adolescents, and that reactive aggression was no longer associated with narcissism once age, gender, and levels of proactive aggression had been statistically controlled for in the analysis.

Narcissism's close relationship with proactive aggression raises the possibility that it might be also related to bullying, which is one of the most common and serious forms of proactive aggression (Griffin & Gross, 2004). Three studies have directly investigated the relationship between narcissism and bullying. The first of these studies was a large-scale survey conducted in Singapore

measuring levels of narcissism and bullying (Ang, Ong, Lim, & Lim, 2010). Unfortunately, the authors used their own measure of bullying, which more closely represented a measure of aggression than one of bullying as it did not require measured behaviours to be repeated over time, though they did require those behaviours to occur in a relationship where there is an imbalance of power. Ang et al. found that bullying was predicted by the exploitative aspect of narcissism, mediated in part by approval-of-aggression beliefs. Second, Fanti and Kimonis (2012) conducted a large-scale study measuring levels of narcissism, bullying and victimisation in Greek-Cypriot adolescents. The authors found that narcissism was positively related to bullying in their sample and that higher levels of narcissism prolonged the duration of the bullying behaviour in which these individuals engaged. Finally, Stellwagen and Kerig (2012) measured levels of bullying, theory of mind, and narcissism in US adolescents receiving inpatient psychiatric treatment. The authors identified that narcissism moderated a relationship between bullying and theory of mind such that for those with greater narcissism there was a positive relationship between theory of mind and bullying, while for those with lower levels of narcissism these variables held an opposite relationship. Though the research is currently limited, there does appear to be a relationship between narcissism and bullying in adolescence.

Summary

The present literature review has highlighted that there continues to be contention in the results of studies investigating the relationship between self-esteem and aggression in adolescence (e.g. Golmaryami & Barry, 2010; Lau, et al., 2011; Seals & Young, 2003; Wallace, et al., 2012). This contention can be understood as being due to a number of methodological flaws in the field of research including an overreliance on self-report measures, a lack of adequate controls for victimisation and impression management, and the treatment of self-esteem as a unilateral construct.

Viewed as a dual processing model with implicit and explicit forms, the relationship between self-esteem and aggression is clearer. Low implicit self-esteem combined with high explicit self-esteem, sometimes termed defensive self-esteem, has been shown to be the combination most strongly associated with reactive aggression (Sandstrom & Jordan, 2008). The relationship with reactive aggression can be explained by the theory of threatened egoism (Baumeister, et al., 1996). This theory postulates that a person with high explicit self-esteem made vulnerable by low implicit self-esteem will be sensitive to perceived threats to their sense of self and will be motivated to defend themselves aggressively when these threats are present.

The present literature review has highlighted that defensive self-esteem can be seen as a feature of narcissism and that these are both predictive of reactive aggression. Narcissism, itself, has been described as featuring a high and fragile explicit self-esteem and a consequent sensitivity to criticism (Zeigler-hill, 2006). As a result, narcissism as a construct has been consistently shown to relate to reactive forms of aggression (Barry et al., 2007; Bukowski, et al., 2009; Fossati, et al., 2010; Marsee, et al., 2005; Ojanen, et al., 2012).

The present literature review has also highlighted the relationship between narcissism and proactive forms of aggression. The narcissism literature describes a high and fragile explicit self-esteem. This form of self-esteem, made inherently vulnerable by low implicit self-esteem, necessitates the regular use of self-regulatory strategies to maintain (Morf & Rhodewalt, 2001). These self-regulatory strategies include anti-social behaviours, one of which is proactive aggression (Washburn, et al., 2004). The use of proactive aggression secures power and dominance over others, elicits fear and admiration from peers, and constructs and feeds a grandiose image back to the self. Indeed the present review demonstrates that narcissism has been able to consistently predict levels of proactive aggression in adolescence (Kerig & Stellwagen, 2010; Sean & Ang, 2008; Wallace, et al., 2012; Washburn, et al., 2004), and recently has even begun to be related to bullying (Ang, et al., 2010; Fanti & Kimonis, 2012; Stellwagen &

Kerig, 2012), which may be the most common and most damaging form of proactive aggression (Griffin & Gross, 2004). As such narcissism may be a more useful construct than self-esteem in predicting aggression because it is able to predict both reactive and proactive forms of aggression consistently, and because it holds the future promise of being able to consistently predict adolescent bullying.

Directions for Future Research

Though the use of a combination of measures of implicit and explicit self-esteem have been shown to be useful in predicting aggression, the measures of implicit self-esteem, such as the implicit association test, take time to administer to each young person individually. Narcissism measures such as the Childhood Narcissism Scale (CNS, Thomaes, et al., 2008) and the NPIC (Barry, Frick, & Killian, 2003) are questionnaires that can be administered to large groups simultaneously, which confer pragmatic benefits to those researchers opting to use narcissism to predict aggression in adolescence. The present literature review highlights that, rather than continue to focus on self-esteem, future research should focus on understanding the relationship between narcissism and aggression, particularly the possibility that narcissism is related to bullying.

Recent research has begun to identify a relationship between narcissism and bullying (Ang, et al., 2010; Fanti & Kimonis, 2012; Stellwagen & Kerig, 2012). This is a particularly important area of study as both bullying and narcissism have such problematic outcomes for both individuals involved directly and for society as a whole (Campbell, et al., 2005; Klomek, et al., 2010; Rueger, et al., 2011; Twenge & Campbell, 2009). Such a relationship has only begun to be investigated, however, and a study looking at the two variables has yet to be conducted in the UK. More research needs to be conducted to replicate the link between bullying and narcissism in adolescents.

The present literature review highlights the need for future research to identify the mechanisms through which narcissism and bullying are related in adolescence. Though the theoretical literature predicts that bullying would be one

of a number of anti-social interpersonal self-regulatory strategies endorsed by narcissists to maintain their inflated self-esteem (Morf & Rhodewalt, 2001; Washburn, et al., 2004), this mechanism has yet to be tested in research. It is possible that the relationship between narcissism and aggression is also facilitated by other aspects of the narcissistic personality. One possibility is their agentic self-focus, which leads to a need for power and dominance. A second possibility is their low communal focus that reduces affective empathy. It has been well established that affective empathy is inversely related to bullying (Jolliffe & Farrington, 2006, 2011; Gini, et al., 2007; Stavrinides, Georgiou, & Theofanous, 2010). As such it is possible that the lack of empathy borne of the lack of communal traits of narcissists removes this factor that would otherwise prevent them from bullying. If this is the case then the addition of communally focussed traits to adolescents' personalities, as suggested by Campbell and Foster (2007), may help to stem the negative consequences of both bullying and narcissism. It will be imperative for future research to investigate the possibility that a relationship between bullying and narcissism may be partially mediated by other factors, including empathy, and that one or more of these mediating factors may represent a method through which we might intervene.

Future research will need to attend to the methodological criticisms of past research highlighted by the present review. A number of studies, including some of those investigating the relationship between bullying and narcissism operationalized bullying in such a way as to undermine the integrity of Olweus' original definition (e.g. Ang, et al., 2010). In this way research has often measured forms of aggression as a proxy to bullying. It will be important for future research to replicate past findings using measures of bullying that maintain the integrity of Olweus' original definition, requiring measured behaviours to be intentionally harmful, to be repeated over time towards an individual or group, and to be enacted within a relationship where there is an imbalance of power. This will be particularly important in future research investigating the relationship between narcissism and bullying. It is possible that narcissists with greater social skill and

Machiavellianism might stop short of bullying because of the increased likelihood of being caught, choosing instead to direct their proactive aggression toward multiple targets and using multiple methods in order to avoid detection. Thus research investigating narcissism may find different results depending on how rigorously they operationalize bullying.

Future research will also need to attend to the possibility of response bias, which has been highlighted by the present review as particularly salient when studying self-esteem and narcissism. Past research has also highlighted that self-esteem impacts the way in which research participants respond to questions about their behaviour (Thomaes, et al., 2007). In particular research has shown that participants' self-esteem changes whether they perceive themselves and their behaviours to be aggressive, and that this results in self-report measures of aggression being different to peer/teacher reports, as well as to their reactions to vignettes (Thomaes, et al., 2007). This may be due either to participants' interpretations of their behaviour being influenced directly by their self-perception or by their self-perception influencing their need to manage others' (and their own) impression of them by changing how they respond to self-report measures. It is possible that narcissism may influence self-report measures of aggression and bullying in the same way. It will be important for future research to replicate past findings, particularly those investigating narcissism and aggression or bullying, using multiple methods and while controlling for participants' propensity to manage others' impression of them.

Research investigating bullying has often considered bullies to be a homogenous group. Recent research has highlighted that this is hazardous, finding that the results of research can vary widely depending on whether bully/victims are analysed separately to 'pure bullies' (Kokkinos & Panayiotou, 2004). However, even considering 'pure bullies' to be a homogenous group may be equally hazardous. It is entirely possible that different types of bully may engage in bullying behaviour for different reasons, with different interventions being consequently more effective for different groups. Though the present

literature review has highlighted the possibility that narcissists may represent two of these groups, one motivated to bully by a need for power and dominance, and the other facilitated by low affective empathy; it is possible that other groups may bully for different reasons. If there are multiple groups of individuals who engage in bullying for different reasons it may be they will respond in different ways to the various forms of intervention that are available. As a result future research will need to work to identify these groups and consider how their motivations for bullying differ before measuring the effectiveness of interventions with each of them separately.

Implications for Educational Practice

There are a number of implications for educational practice that are indicated by the present review. First, western educational practice has contributed to a rise in narcissism in schools by fostering competition and individualism (Twenge & Campbell, 2007) and the results of the present review imply that this is likely to have increased aggression and bullying in schools. Individualism in schools is encouraged by an educational curriculum that rewards the success of the individual working towards individual goals. Though schools are often encouraged to give young people a sense of community and skills in teamwork, academic achievements are not contingent on team working or work towards communal goals. Thus the UK education system would benefit from a shift in the focus of the curriculum to include more group and team working and from coursework with a communal focus that yields practical benefits for local communities as well as academic benefits for the individual.

Educational practice in the UK has also contributed to the rise of narcissism and defensive self-esteem by its endorsement of the self-esteem movement. Self-esteem as a unilateral construct was a seductive notion in the 1970s, with the possibility that it could predict a number of positive outcomes and that boosting self-esteem could be beneficial to young people in a number of ways (Branden, 1969). However the present review has demonstrated that the complex nature of

self-esteem means that raising explicit self-esteem without attending to low implicit self-esteem could give rise to defensive self-esteem that may actually have increased levels of aggressiveness in schools. Some writers even consider that attempting to raise self-esteem by overpraising and rewarding without those rewards being linked to attainment of any kind gives young people a sense of entitlement and raises their narcissism rather than implicit self-esteem (Twenge & Campbell, 2009). Thus the present review highlights the need for educators to ensure that they encourage hard work and success to promote a sense of self-efficacy and the value of effort and determination, without promoting self-aggrandisement and entitlement.

The present review highlights the importance of educators not treating bullies as a homogenous group, particularly when implementing interventions to tackle bullying. Historically anti-bullying interventions have been delivered to bullies generally without targeting specific groups of bullies. Yet to consider bullies a homogenous group may be unwise as the present review has highlighted one specific group of bullies, that of narcissists, that may benefit from a specifically tailored intervention designed to help them to develop more of a communal focus. Research has highlighted that adult narcissists can increase their commitment to a romantic relationship through communal activation exercises including being primed by watching pictures of empathic exchanges and by spending time discussing their partner's goals (Finkel, Campbell, Buffardi, Kumashiro, & Rusbult, 2009). It may be possible to create an intervention for adolescent narcissistic bullies using the same communal activation mechanism, but further research is needed to test this. This may not be the best intervention for other groups of bullies, whose motivation to bully and methods of doing so may differ greatly to that of narcissists. As such the present review highlights the need for bullying interventions to reflect the diversity of those that engage in bullying and ensure that interventions are tailored to work with specific groups of bullies and are targeted for use with those groups in practice.

The present review highlights the possibility that narcissists endorse bullying as one of a number of interpersonal self-regulatory strategies through which they can defend and maintain their inflated self-esteem. Both bullying and narcissism have severe consequences for individuals and society and represent a substantial problem for schools (Arseneault, et al., 2010; Campbell, et al., 2005; Juvonen, et al., 2000; Rueger, et al., 2011; Twenge & Campbell, 2009). If bullying and narcissism are related then engendering communal traits in narcissists such as warmth, the capacity to care for others, and morality, might help to stem the negative consequences of narcissism as well as reduce bullying in schools (Campbell & Foster, 2007). Thus the present review indicates a need to include communal focussed activities in schools. Being able to intervene to stem the negative consequences of both bullying and narcissism would have substantial benefits for both the individuals involved and society as a whole. Consequently the review highlights the need for schools to prioritise their work to reduce narcissism in adolescence through the aforementioned methods in order not only to reduce the negative effects of narcissism but also to reduce the high rates of bullying in UK secondary schools.

Chapter 2

Are Narcissists More Likely to Engage in Bullying Behaviour and What are the Mechanisms Involved?

Bullying

Bullying is a substantial problem for adolescents with around half reporting having been bullied at some point (Chamberlain, et al., 2010), and substantial long-term consequences for victims in physical (Nishina, Juvonen, & Witkow, 2005), psychological (Arseneault, et al., 2010), and educational (Rueger, et al., 2011) domains. Bullies are unlikely to be a homogenous group (see Frisén, Holmqvist, & Oscarsson, 2008; Thornberg & Knutsen, 2011) yet little research has worked to identify distinct groups of bullies. It is imperative that research works to understand these groups and their distinct motivations for and methods of bullying in order to design and target anti-bullying interventions most effectively.

Bullying is any repeated behaviour that causes harm to an individual or group over time that is enacted in a relationship where there is an imbalance of power (Olweus, 1999). Bullying can either be direct or indirect (Griffin & Gross, 2004; Lagerspetz, Björkqvist, & Peltonen, 1988), the prior representing physical or verbal aggression including hitting, pushing, aggressive teasing, and name calling, and the latter representing relational forms of aggression (Crick & Grotpeter, 1995). Relational aggression involves the manipulation of social relationships to reduce the social standing of the target in some way; this can be achieved through spreading rumours, gossiping about the target, or deliberately leaving the target out of social activities (Björkqvist, Lagerspetz, & Kaukiainen., 1992; Rappaport & Thomas, 2004). Though many young people disagree that socially excluding someone is a form of relational bullying (Smith, et al., 2002), the emotional pain from social exclusion is felt in the same way, using the same neuroanatomy (Dewall, et al., 2010, Kross, Berman, Mischel, Smith, & Wager, 2011), as physical pain and its outcomes have been shown to be equivalent to physical bullying (Dukes, et al., 2009; Riva, et al., 2011).

Bullying has substantial consequences for its victims. Bullying has been shown to contribute independently to young people's increased risk of depression (Arseneault, et al., 2010), loneliness, low self-worth (Juvonen, et al., 2000), and an increased risk of suicide (Klomek, et al., 2010). One very large scale study demonstrated that experiencing childhood bullying doubled participants' risk of attempting suicide in later life Meltzer et al. (2011). The academic progress of victims of bullying is also severely affected by their victimisation, reducing their school attendance, classroom participation (Buhs, et al., 2006), and academic performance (Schwartz, et al., 2005). One study demonstrated that the reduction in academic performance persisted long after the bullying had stopped (Rueger, et al., 2011). Those who are victimised even have an increased risk of physical symptoms such as headaches and may be at a greater risk of becoming physically unwell (Nishina, et al., 2005). Those subject to social exclusion over time have been shown to develop symptoms similar to that of chronic physical pain (Glombiewski, Hartwich-Tersek, & Rief, 2010). Finally, one recent study demonstrated that men who had experienced childhood bullying reported being charged with three times the number of different crimes as those who had not been bullied, including aggravated assault, burglary, and arson (Sansone, Lam, & Wiederman, 2013).

Given the severe outcomes for victims it is particularly concerning that bullying is a widespread, frequently occurring behaviour. In the UK mainstream classroom bullying occurs at a rate of once every 30 minutes, and once every 13 minutes in the playground (Craig, Pepler, & Atlas, 2000). A recent UK survey found that at the time of administration around 12% of children were being regularly bullied and that nearly a quarter of these children had been victimised for over a year. In a recent survey of 250,000 children, the Department for Children Schools and Families found that just under half of 6-10 year olds had been the victim of bullying at some point (Chamberlain, et al., 2010), and for just under half of those children their victimisation had been a weekly occurrence. Both of these studies relied upon self-report measures of bullying, which are subject to self-

report bias and often fail to capture relational forms of bullying as many children do not see social exclusion as a form of bullying (Boulton, et al., 1999; Smith, et al., 2002). Thus the actual number of children that have been the victim of bullying and the number of children being victimised currently may be much higher than research has estimated.

Educational professionals have been motivated to tackle the problem of bullying in schools both due to the large numbers of children experiencing bullying and to the severe outcomes predicted for those children. A number of interventions to reduce bullying have been designed and implemented in UK schools and research has highlighted their effectiveness, particularly that of sanctions approaches (Ttofi & Farrington, 2011), restorative justice (Drewery, 2007; Morrison, 2006; Wong, Cheng, Ngan, & Ma, 2011), and what has become termed the support group method (Demko, 1996; Young, 1998). Though meta-analyses have shown that anti-bullying interventions are able to significantly reduce bullying in schools, much of the research used in these analyses show small individual effect sizes (Ttofi & Farrington, 2011), and many of these meta analyses themselves show small overall effect sizes (Ferguson, San Miguel, Kilburn, & Sanchez, 2007; Smith, Schneider, Smith, & Ananiadou, 2004). These small effect sizes may be translating to a limited utility of studied interventions in practice because though they have been purported to significantly reduce bullying in schools (Ttofi & Farrington, 2011), the rate of bullying in UK schools remains high (Chamberlain, et al., 2010). One of the reasons that anti-bullying interventions have shown such small effect sizes in research may be that they are poorly targeted. Young people themselves identify a number of different reasons that people engage in bullying behaviour (Frisén, et al., 2008; Thornberg & Knutsen, 2011). Research, however, has focussed on providing explanatory models of bullying that treat bullies as a homogenous group. However, this population may not be homogenous, and this universal approach may well have hampered the effectiveness of these interventions. Specifically, two groups of bullies are identified in the literature. Indeed, Cook, Williams, Guerra, Kim, &

Sadek (2010) completed a large scale meta-analysis and demonstrated that there were indeed two groups of bullies, one socially unskilled and sociometrically rejected, the other socially skilled and popular.

The first of group of bullies research has identified is consistent with Crick and Dodge's (1994) assertion that bullies have poor social information processing skills. A number of researchers have identified bullies to have a poor sociometric status. Boulton and Smith (1994), for example, investigated the peer nominations of children and found that those that were sociometrically rejected had a higher chance of receiving bully nominations than other groups, and that bullies were more likely to belong to a sociometrically rejected group than their peers. In another study, Cerezo and Ato (2005) found that sociometrically rejected children were more likely to be bullies and sociometrically accepted children were less likely to engage in bullying behaviour. In 2004, Ojala and Nesdale stated that often bullies belong to an equally rejected group to that of their victims, and for this first group of bullies this appears to be the case. Indeed it is their rejected status that provides the motivation for their engaging in bullying behaviour. Ojala and Nesdale stated that rejected groups have the greatest need to improve their social status and in 1978 (reprinted in 2010) Tajfel described how sociometrically rejected individuals could raise their social standing within in-groups by publicly ridiculing and derogating other sociometrically rejected individuals or groups. In 1995, Noel, Wann, & Branscombe demonstrated how rejected social groups in schools can use this method to increase their social standing and gain greater acceptance by peers. As such it is possible that the act of bullying by sociometrically rejected individuals represents an effort to gain greater acceptance and a greater sense of belonging to more powerful majority groups in school (Ojala & Nesdale, 2004).

The second group of bullies have a higher sociometric status than the first (Vaillancourt, Hymel & McDougall, 2003). This group of bullies are consistent with Sutton, Smith, & Swettenham's (1999) theoretical framework for bullying that considered the effectiveness of bullying behaviour to be contingent on the social

intelligence of the bully and their ability to determine the mental state of other people. This awareness allows these bullies to anticipate the consequences of different behaviours and select the ones that allow them to manipulate their peer groups to their own benefit most effectively. Thus for this group bullying is associated with higher rather than lower social intelligence (Cook, et al., 2010; Peeters, Cillessen, & Scholte, 2010). Like the first group of bullies the second group bully in order to improve their social status. However, for this group bullying is not about developing a sense of belonging but about securing power and dominance over others. Pellegrini and Bartini (2001) considered bullying to be a method through which individuals could gain power and dominance over other children to gain access to greater resources. These resources take the form of toys for children and sexual relationships for young adults. Pellegrini and Long (2002) found that bullying increased temporarily following school transition and concluded that this was due to the need for this particular group of bullies to secure power and dominance in new social hierarchies. Once these bullies have acquired this power and dominance they reduce their bullying behaviour as maintaining their status requires engaging in less of this behaviour than it did to secure it.

Both of these groups of bullies are important to understand because the bullying enacted by both of these groups will be having a significant impact on their victims. The need to belong is a fundamental and universal human need (Maslow, 1970) and thus it is understandable that the first group of bullies, with a poorer sense of belonging due to their low sociometric status and poorer social intelligence, would choose to bully in an effort to gain a greater sense of integration into more powerful majority groups. However, the need for power and dominance is not a universal need and research has yet to explain why this second group of more socially intelligent and popular bullies has such a need. We are particularly interested in this second group of bullies because this need for power and the use of anti-social strategies for personal gain could both be explained by high levels of narcissism.

Narcissism

Narcissists have an agentic self-focus, few communal traits or an interest in communal traits, a sense of being special or different, a sense of entitlement, and an orientation toward personal success. This particular aspect of narcissism is best described by the agency model (Campbell & Foster, 2007), which also explains why self-regulatory strategies employed by narcissists rarely include communally focussed behaviours such as helping others or being explicitly caring or considerate: though these would support explicit self-esteem, the agentic self-focus of narcissists leads their self-regulatory strategies to be inherently selfish in nature.

Narcissism as a personality trait is also characterised by a core vulnerability represented by a high explicit self-esteem and low implicit self-esteem, sometimes termed an inflated sense of self. This internal dissonance experienced by more narcissistic individuals leaves them vulnerable to criticism and dependent on a number of self-regulatory strategies to maintain their sense of self (Morf & Rhodewalt, 2001; Salmivalli, 2001). These self-regulatory strategies include admiration seeking, bragging, displaying material goods, making an effort to look good and to be seen looking good. Research has shown that these self-regulatory strategies also include the instrumental use of antisocial behaviours including proactive aggression (Washburn, et al., 2004).

The core vulnerability of narcissism means that narcissists, unlike non-narcissists, have a need to demonstrate power, dominance, and superiority over others in order to maintain an inflated sense of self in the presence of dissonant core self-views. Their means of meeting this need can be more or less adaptive, and narcissism itself has both adaptive (see Twenge & Foster, 2008) and maladaptive (Barry, et al., 2007) forms. Adaptive narcissism is characterised by greater self-confidence, assertiveness, leadership ability, and self-sufficiency, while maladaptive narcissism is characterised by a sense of entitlement,

exhibitionism and exploitativeness (Raskin & Terry, 1988). Supporting this distinction in adolescents, Barry et al. (2003) found that maladaptive narcissism was associated with conduct problems and callous-unemotional traits and though there was a high correlation between maladaptive and adaptive narcissism, the latter was not significantly related to those negative outcomes.

Narcissism is itself a problem facing society and has been steadily increasing in western societies (Twenge & Foster, 2010). Those with high levels of narcissism have a tendency to strive toward personal goals and will seek out short-term benefits for themselves even if this to the detriment of other people or society (Campbell, et al., 2005). Young people with higher levels of narcissism have been shown to exhibit behavioural difficulties and have a higher risk of delinquency (Barry, et al., 2003). In a recent book, Twenge and Campbell (2009) describe how rising levels of narcissism are connected to increasing school violence, the slow response of western societies to climate change, and the current global financial crisis. Narcissism may also be related to adolescent bullying, which is one of the most substantial problems facing secondary education in the UK.

Narcissism and Bullying

Narcissism has been consistently found to predict levels of both reactive aggression (Barry et al, 2007; Fossati, et al., 2010; Bukowski, et al., 2009; Ojanen, et al., 2012; Marsee, et al., 2005) and proactive aggression in adolescents (Wallace, et al., 2012; Washburn, et al., 2004; Seah & Ang, 2008). In one recent study, Kerig and Stellwagen (2010) demonstrated that together with callous-unemotional traits and impulsivity, narcissism was able to predict 12.3% of the variance in teacher reported levels of adolescents' proactive aggression. Bullying is one of the most common and serious forms of proactive aggression (Griffin & Gross, 2004) and narcissism's close relationship with proactive aggression raises the possibility that narcissists might represent the second group of bullies

identified in the literature, those that are motivated by a need for power and dominance as opposed to a sense of belonging.

Given the severe consequences of bullying and the clear relationship between narcissism and proactive aggression it is surprising that a potential relationship between narcissism and bullying has only just begun to be investigated. Three studies have recently directly investigated this relationship. In 2010, Ang et al published a large-scale survey of 346 Singaporean adolescents, within which the authors measured participants' levels of bullying, narcissism, and approval of aggression beliefs. As is frequently the case in bullying research, the authors did not ensure that they measured all of the aspects of behaviours that are necessary to term them bullying behaviours. In this instance, though the researchers measured harmful behaviours exhibited in a relationship where there was an imbalance of power, they did not mention the need for those acts to be repeated toward an individual or a group. As such Ang et al. measured levels of aggression, though they termed it bullying, and found that they were predicted by the propensity of narcissists to exploit others, which were only partially mediated by approval-of-aggression beliefs.

More recently, Fanti and Kimonis (2012) conducted a large-scale study of 1416 Greek-Cypriot adolescents, measuring their narcissism, impulsivity, conduct problems, bullying and victimisation. They found that young adolescents exhibiting high levels of narcissism engaged in more bullying behaviour and that this behaviour persisted for longer than in those exhibiting lower levels of narcissism. In another recent study, Stellwagen and Kerig (2012) measured theory of mind and narcissism in adolescents receiving inpatient psychiatric treatment in the United States. The authors found that theory of mind was positively related to bullying but only for those exhibiting greater levels of narcissism, for those exhibiting lower levels of narcissism theory of mind was inversely related to bullying.

Both Stellwagen and Kerig (2012), and Fanti and Kimonis (2012) operationalized bullying in a rigorous way in their research. However, neither study controlled for a number of potentially confounding variables that might otherwise explain their identified relationship between bullying and narcissism. First, neither study accounted for the effects of the propensity of participants to manage other people's impression of them, which may have influenced particularly the self-report measures employed by Fanti and Kimonis, but also the teacher report measures employed by Stellwagen and Kerig where the behaviour of students in the class may reflect on the teaching ability of their teacher. Second, only Stellwagen and Kerig accounted for the effect of callous unemotional traits, which have been shown to be related to both narcissism (Kerig & Stellwagen, 2010) and bullying (Muñoz, et al., 2011). Finally, though Stellwagen and Kerig considered the role of a theory of mind, neither they nor Fanti and Kimonis considered the possibility of affective and cognitive subtypes of empathy mediating the relationship between narcissism and bullying. None of these studies have been able to examine the mechanisms through which narcissism and bullying are related. The present study will examine two of the most promising mechanisms, the need for power, and affective empathy. Both of these mechanisms are promising but little research has investigated need for power as a construct in the context of bullying; there is much more research on empathy, which will now be reviewed.

The Mediating Role of Empathy

Empathy has been described as two related components: as an affective trait, which facilitates the experience of the emotions of other people (Mehrabian & Epstein, 1972), and a cognitive ability to understand the emotions of other people (Hogan, 1969). Empathy as a unilateral construct has been shown to be inversely related to bullying (Chaux, et al., 2009; Nickerson, et al., 2008; Nordgren, et al., 2011). When the components of empathy are considered independently they have been shown to be related to bullying in different ways.

It has been suggested that affective empathy, the tendency to feel what another person is feeling, should inhibit bullying behaviour because it would cause bullies to share the emotional pain of their victims (Wolke, Woods, Bloomfield, and Karstadt, 2000). Indeed a number of studies have found that affective empathy is inversely related to bullying (Jolliffe & Farrington, 2006, 2011; Gini, et al., 2007; Stavrinides, et al., 2010). However, a number of other studies have identified that cognitive empathy, the ability to know that another person is feeling, is positively related to bullying (Caravita, Di Blasio, & Salmivalli, 2009; Yeo, Ang, Loh, Fu, & Karre, 2011). As such individuals that have the propensity to bully benefit from both high cognitive empathy, perhaps in order to know how to hurt other people, and low affective empathy so that doing so does not negatively emotionally influence the bully themselves.

The combination of high cognitive empathy and low affective empathy has been identified as a feature of narcissism in research (Vonk, et al., 2012; Wai & Tiliopoulos, 2012). One of the features of narcissism is a strong agentic focus and weak communal focus. As such individuals with a narcissistic personality may be too self-focussed to attend to the perspective or emotions of others (Vonk, et al., 2012). Lending credence to this theory, Wai and Tiliopoulos (2012) measured different facets of empathy and narcissism alongside psychopathic traits and Machiavellianism in Australian undergraduate students. The authors found that narcissism was significantly inversely correlated with affective empathy and was unique amongst the 'dark triad' (here defined as narcissism, psychopathy, and Machiavellianism) in being significantly positively correlated with cognitive empathy.

Both narcissism and bullying have been related to low affective empathy and high cognitive empathy in research, yet none of the limited research that has investigated the relationship between narcissism and bullying considered the possibility that such a relationship may be partially mediated by affective and cognitive empathy. Such a possibility is important because Campbell and Foster (2007) believe that some of the negative aspects of narcissism can be reduced by

increasing the communal focus of narcissists and recent research has begun to show that affective empathy can be induced in more narcissistic individuals by inviting them to have more of a communal focus (Hepper & Hart, 2010). Thus, if the present research can identify a mediating role for affective empathy in the relationship between narcissism and bullying then this may represent a mechanism through which we can intervene to stem the negative consequences of both bullying and narcissism.

Aims of the Present Study

The present study was designed to replicate and expand upon recent research in the field by investigating the extent to which narcissism and bullying are related in UK adolescents. Our primary hypothesis was that adaptive narcissism would not be related to bullying but that high maladaptive narcissism would be a significant predictor of bullying. Our second hypothesis was that these constructs would be related and that this relationship would remain when the effect of callous unemotional traits and impression management have been controlled.

The present study also tested a hypothesised mediating role of different subtypes of empathy with a prediction that low affective empathy would partially mediate the relationship between maladaptive narcissism and bullying. The present study tested a hypothesised mediating role of need for power in the relationship between maladaptive narcissism and bullying, with a prediction that this would be another partial mediator. The present study tested these two mediators in a multiple mediation model to determine which of these aspects of narcissism, the greater need for power or the lack of affective empathy, would be more important in predicting bullying behaviour.

Method

Participants. We recruited 416 (176 boys, 202 girls, 39 did not report their gender; mean age = 12.47, SD = 1.10) pupils aged 11-14 from a single secondary school in the south of Hampshire. The sample was restricted to this age group for two reasons. First, until the age of seven children express inflated self-views that reflect a naturally narcissistic stage of child development (Harter, 2006). As a result, we opted to survey young people from secondary schools, where self-image is based more on social comparisons. Second, one of the main measures used in the study, the Childhood Narcissism Scale (CNS), has only been extensively validated for use with young people up to the age of 14 (Thomaes, et al., 2008). Aside from parental consent and participant assent, age was the only exclusion criteria.

Tabachnik and Fidell (2007) set out an equation for determining a reasonable sample size for multiple regression analyses: $N=50+8m$ (where N is the number of participants and m represents the number of independent variables). Given this rule of thumb the present study needed 244 participants due to the presence of 9 predictor variables (the number of participants has been doubled as the data will be split by gender); our dataset of 416 participants meets this requirement for sufficient power.

Measures. The measures used in the present study can be found in Appendix A and are detailed below.

Bullying. One section of the Olweus Bully-Victim Questionnaire (Olweus, 1996) consists of 10 items (e.g. "I hit, kicked, pushed, and shoved them around or locked them indoors") and measures the frequency with which young people engage in a number of different types of bullying, which encompass both direct and indirect forms, by asking them to rate how often they have engaged in such behaviour on a 5-point scale from 'It has not happened in the past couple of months' to 'Several times per week' (Muñoz, et al., 2011). We removed one question from this section because it referred to sexual bullying, which was not the

focus of the present research. The Bully-Victim questionnaire has been validated for use with secondary school-age population in the past, and in these studies it has demonstrated good internal consistency ($\alpha=.8$; Hartung, Little, Allen, & Page, 2011; Kyriakides, Kaloyirou, & Lindsay, 2006). In the present study the Olweus Bully/Victim Questionnaire has also demonstrated strong internal consistency ($\alpha=.921$).

Narcissism. The Childhood Narcissism Scale (CNS; Thomaes, et al., 2008) consists of 10 items (e.g. "I am a very special person") designed to capture all of the different elements of narcissism as a personality trait. These items are rated on a 6-point scale ranging from 1 (*not at all true*) to 6 (*completely true*). This measure has been validated for use with a secondary school-age population (Thomaes, Bushman, de Castro, Cohen, & Dennisen, 2009; Thomaes, Stegge, Bushman, Olthof, & Denissen, 2008). In past research the CNS has been shown to have a strong internal consistency ($\alpha=.8$; Thomaes, et al., 2008) and this is supported in our research ($\alpha=.823$).

The Narcissistic Personality Inventory for Children (NPIC; Barry, et al., 2003) is a downward extension of the NPI (Raskin & Hall, 1979) designed to mirror the content of this scale but using language that is more developmentally appropriate for adolescents (e.g., replacing "Modesty doesn't become me" with "I like to show off the things that I do well"). This scale measures participants' responses by asking them to choose one of two statements, the first being related to high narcissism such as 'I like being the centre of attention' and the second being related to low narcissism e.g. 'I am uncomfortable being the centre of attention'. 'This scale can be broken down into two subscales: adaptive narcissism and maladaptive narcissism, with eight questions pertaining to each. In the present research we found these subscales to have satisfactory internal consistencies ($\alpha=.674$ for adaptive narcissism, $\alpha=.659$ for maladaptive narcissism)¹.

¹ We planned to conduct two waves of data collection to ensure that we collected enough data to power a multiple mediation analysis with nine predictor variables. However, the NPIC was only added to the questionnaire following preliminary analysis after the first wave of data collection showed theoretical

Empathy. The Interpersonal Reactivity Index (IRI; Davis, 1983)

Perspective Taking 7-item subscale is a measure of cognitive empathy, while the Empathic Concern 7-item subscale measures affective empathy (Gini, et al., 2007). Statements such as “I try to look at everybody’s side of a disagreement before I make a decision” for Perspective Taking and “I would describe myself as a pretty soft-hearted person” for Empathic Concern are evaluated on a 6-point scale ranging from 0 (*does not describe me well*) to 6 (*describes me very well*). These two subscales have been used with and validated for use with an adolescent population, and with this population it has been shown to demonstrate satisfactory internal consistency ($\alpha=.69$ for the Perspective Taking subscale, $\alpha=.73$ for the Empathic Concern subscale; Gini, et al., 2007). In the present research we obtained similar levels of internal consistency ($\alpha=.697$ for the Perspective Taking subscale, $\alpha=.65$ for the Empathic Concern subscale).

Need for power. There was no appropriate scale available in the literature that had been validated for use with adolescents so we developed six items for the purpose of this study that captured adolescents’ need for power over other people at school. Participants are invited to respond to these items (e.g. “At school, I like to exert power over other people”) on a 6-point scale ranging from “*Not at all true*” to “*Definitely true*”. This new scale demonstrated strong internal consistency with our sample ($\alpha=.905$).

Impulsivity. The Urgency, Premeditation, Perseverance, and Sensation seeking Impulsive Behaviour Scale (Whiteside & Lynam, 2001) measures four dimensions of impulsivity in 42 items (e.g. “I’ll try anything once”). Agreement with these items was measured on a 6-point scale ranging from “*Disagree strongly*” to “*Agree strongly*”. The scale has been shown to demonstrate good internal consistency with the adolescent population ($\alpha=.8$; d’Acremont & Van der Linden, 2007). 17 items with the highest factor loadings from the original study (Whiteside

inconsistencies in the behaviour of the CNS in relation to other predictor variables. We added the NPIC to the questionnaire for the second wave of data collection to better understand the behaviour of the CNS in relation to these variables and to ensure that our measures of narcissism captured the complete construct (see the results section for further discussion).

& Lynam, 2001) were selected for use in a short form of the UPPS for use with our sample. Using this short form with our sample we have found high levels of internal consistency ($\alpha=.842$).

Social desirability. The Impression Management subscale of the Balanced Inventory of Desirable Responding Short Form (BIDR-16; Hart, Ritchie, Hepper, & Gebauer, 2012) is a shortened version of the BIDR-40 (Paulhus, 1991). This measure invites participants to rate six statements (e.g. "I sometimes tell lies if I have to") on a scale of 1-6 from "*Not at all true*" to "*Definitely true*". This scale measures participants' propensity to respond to questions in a socially desirable way. The Impression Management subscale of the BIDR-16 has been demonstrated to have good internal consistency ($\alpha=.73$; Hart, et al., 2012). In our sample we found that it had less strong internal consistency ($\alpha=.49$) but because of the nature of this scale lower levels of impression management in the sample are likely to hamper the scale's internal consistency coefficient, so this coefficient may not be the best representation of the reliability of this particular scale. The high test-retest reliability found in the Hart, et al. (2012) study ($r=.74$ over 2 weeks) is a better representation.

Callous unemotional traits. The inventory of callous-unemotional traits (Frick, 2004) is a 24 item measure measuring callous, uncaring and unemotional behaviours. Responses to statements (e.g. "I do not care who I hurt to get what I want") are measured on a 6-point scale from "*Not at all true*" to "*Definitely true*". The measure has been used with adolescents in past research and has been shown to demonstrate a strong internal consistency with this population ($\alpha=.83$; Muñoz, et al., 2011). In our sample we found this measure to demonstrate a similarly strong internal consistency ($\alpha=.828$)

Procedure. Following ethical approval from the University of Southampton Ethics Committee (see appendices B and C) we made contact with a secondary school in the south of Hampshire. With the consent of the head teacher, parents and carers of young people in years seven, eight, and nine, were sent information

sheets and opt-out consent forms using the school's preferred method of communication with parents.

Those young people whose parents or carers had not opted out of the study on their behalf after two weeks were given the opportunity to assent to participation in the survey. Participants were given an information sheet online and given the option of participating in the study they were reading about. The young people needed to assent to participation before they could access the survey online. A prize draw with small monetary prizes was used as an additional incentive. The survey was administered at the beginning of regular Information and Communication Technology lessons. Survey responses were collected using the University of Southampton iSurvey system. During the survey's administration Information and Communication Technology teachers provided support to the young participants by reading questions aloud to those with literacy difficulties, and explaining the meaning of words to those having difficulty comprehending the text.

Results

Data cleaning. In total 416 people completed the survey. Participants' individual scales or subscales were removed from the analyses if less than 2/3 of the items in that scale had been completed. Participants' data were removed entirely either if they had not completed a narcissism measure, or if they had completed fewer than four of the questionnaires in the survey. The data were checked thoroughly for patterns of uniform responding. Data from 388 participants (160 boys, 190 girls, 38 did not report gender; 84.3% white British) remained after cleaning. 25 participants had not completed the bullying questionnaire and a binomial regression analysis demonstrated that whether or not a participant had completed this questionnaire could be significantly predicted by their impression management scores ($B = 0.765$, $Wald(1) = 7.807$, $p = .005$). Those with a greater propensity to manage other people's impression of them were less likely to complete the bullying questionnaire. The wave of administration in which a

participant was recruited was not able to significantly predict their scores on any variable.

Descriptive statistics for each of the variables in the analysis are displayed in table 1.

Scale	N	Mean	Std. Deviation	Z-score Skewness	Z-score Kurtosis
CNS	383	3.133	.932	.065	-.083
Adaptive Narcissism	114	1.251	.248	1.043	.681
Maladaptive Narcissism	111	1.201	.221	1.088	.589
Affective Empathy	380	4.013	.781	-.024	.139
Cognitive Empathy	381	3.556	.851	.188	.281
Impulsivity	348	3.373	.801	-.374	1.079
Impression Management	356	3.226	.737	-.147	1.089
Need for Power	356	2.229	1.150	1.174	1.515
Callous-unemotional traits	356	2.844	.640	.074	.101
Bullying	351	1.253	.520	3.822	17.617

Table 1. Descriptive statistics for measured variables

Data for bullying were highly positively skewed and leptokurtic and could not be normalised using simple transformation. Given the nature of bullying it is entirely possible that levels of bullying are not normally distributed in secondary school populations. Thus it may actually be inappropriate in this case to attempt to normalise the data using complex methods before using parametric statistical methods. The use of bootstrapping is recommended in such cases (Ader, Mellenbergh, & Hand, 2008) as these techniques allow us to use the information from our own sample to make inferences about the distribution of the variable of interest within the population. We can then estimate the accuracy of our statistical methods not by assuming they are drawn from a normally distributed population,

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

but by assuming they are drawn from a population distribution similar to that which we have inferred from the data. We used bootstrapping techniques at each stage of the analysis, resampling our data 5000 times and using both 95% and 99% confidence intervals to determine the statistical significance of our findings.

Correlations. Table 2 depicts the bootstrapped correlations between all of the variables measured in the study.

	1	2	3	4	5	6	7	8	9	10
1. Narcissism (CNS)	1									
2. Adaptive narcissism	.530** (n=75)	1 (n=75)								
3. Maladaptive narcissism	.488** (n=75)	.592** (n=75)	1 (n=75)							
4. Affective empathy	-.008	-.305** (n=75)	-.355** (n=75)	1						
5. Cognitive empathy	.005	-.298* (n=75)	-.436** (n=75)	.504**	1					
6. Impulsivity	-.012	-.1 (n=75)	.104 (n=75)	-.151* (n=75)	-.334* (n=75)	1				
7. Impression management	-.129*	-.254 (n=75)	-.428** (n=75)	.253**	.340**	-.448**	1			
8. Need for power	.462**	.526** (n=75)	.505** (n=75)	-.127*	-.124	.117*	-.357**	1		
9. Callous-unemotional	-.036	.319* (n=75)	.402** (n=75)	-.542**	-.360**	.369**	-.384**	.186**	1	
10. Bullying	.227**	.565** (n=75)	.451** (n=75)	-.205**	-.199**	.204**	-.366**	.412**	.307**	1

Note: n = 315 except where stated * significant at 95% bootstrap confidence interval ** significant at 99% bootstrap confidence interval

Table 2. Correlations Matrix

Bullying was significantly correlated in expected directions with all of the measured variables in the study. There was an unexpectedly strong correlation

between bullying and both the adaptive narcissism subscale of the NPIC and narcissism as measured by the CNS. Even those narcissists who had more of the adaptive traits associated with narcissism were more likely to engage in bullying behaviour.

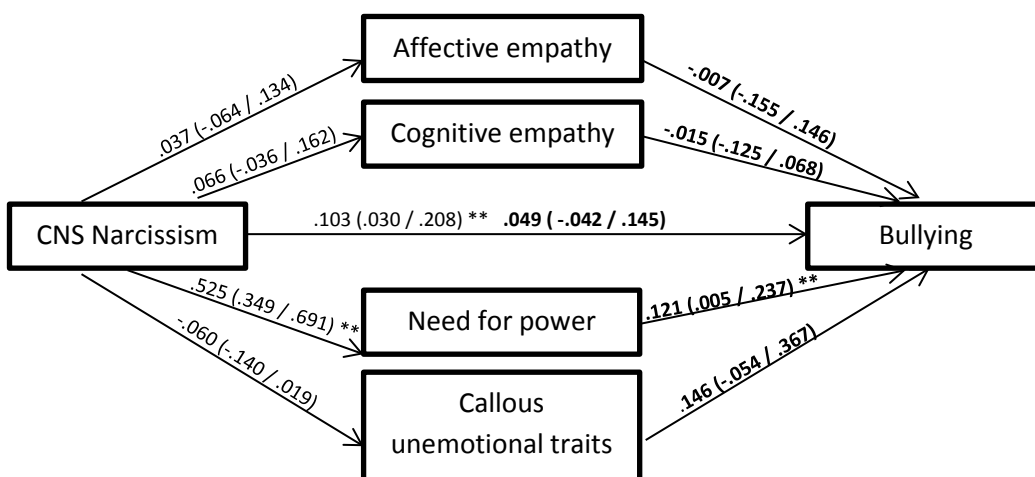
Another correlation of note is that depicting the relationship between impression management and other variables in the analysis, particularly bullying. Those with a greater propensity to manage others' impressions of them were less likely to report engaging in bullying behaviour. As we demonstrated earlier, these individuals were also less likely to complete the bullying questionnaire. Consequently, impression management was controlled for at each stage of the subsequent analyses.

Preliminary analysis of narcissism measures. The correlations matrix demonstrates that there was no significant correlation between CNS narcissism and affective empathy, cognitive empathy or callous-unemotional traits. As a measure of overall narcissism, capturing both adaptive and maladaptive aspects of the construct (Thomaes, et al., 2008), we had expected CNS narcissism to correlate with these variables and the lack of such correlations was an unexpected finding. In order to better understand the behaviour of the CNS we opted to add the adaptive narcissism and maladaptive narcissism subscales of the NPIC to the survey for the second wave of administration. The maladaptive narcissism measure of the NPIC was significantly inversely correlated with affective empathy and cognitive empathy, and positively correlated with callous-unemotional traits as expected. The differences in the way in which our two measures of narcissism were relating to these variables raised the possibility that they were capturing different kinds of narcissism within our sample.

In order to test the possibility that CNS narcissism was capturing adaptive narcissism rather than maladaptive narcissism we conducted a bootstrapped regression analysis predicting CNS narcissism from the adaptive and maladaptive narcissism subscales of the NPIC. We found that adaptive narcissism was a

significant predictor of CNS narcissism ($B = 1.185, t(104) = 5.090, p < .001$) and that maladaptive narcissism was not a significant predictor of CNS narcissism ($B = .763, t(104) = 1.860, p = .066$). These results supported the notion that the CNS was capturing adaptive narcissism rather than maladaptive narcissism.

The relationship between adaptive narcissism and bullying. Figure 2 depicts the multiple mediation model we were interested in testing for adaptive narcissism (as indexed by the CNS) and the results of each stage of testing that model.



Note: Confidence intervals in brackets; reported coefficients are unstandardized; * significant at 95% bootstrap confidence interval ** significant at 99% bootstrap confidence interval

Figure 2. Bootstrapped regression analyses for adaptive narcissism

We first conducted a bootstrapped regression analysis to determine whether bullying was predicted by adaptive narcissism as measured by the CNS while controlling for impression management. We anticipated that because the CNS was measuring adaptive narcissism and adaptive narcissism is generally considered a positive trait characterised by leadership ability, a desire for authority

and sense of superiority, that it would not be predictive of bullying. However, we found that adaptive narcissism was a significant predictor of bullying.

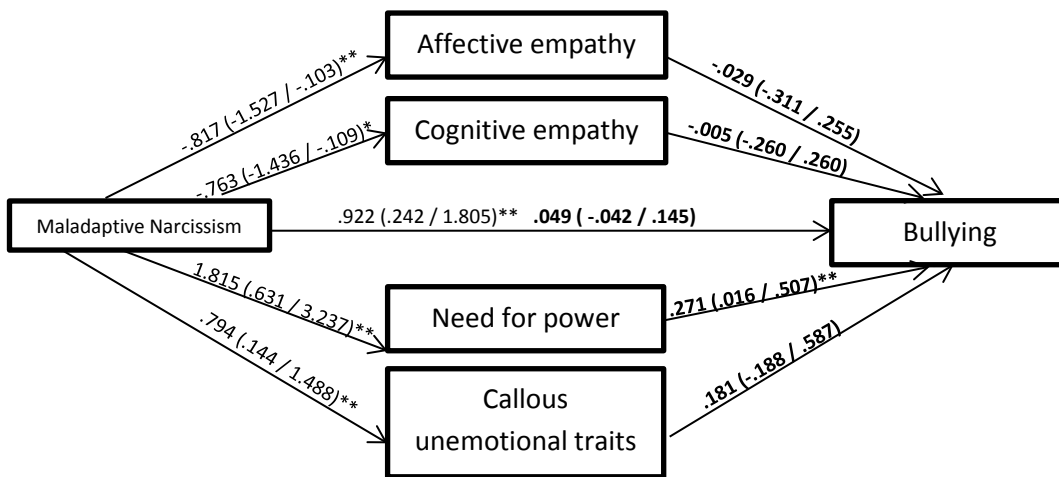
Given that adaptive narcissism as measured by the CNS was predictive of bullying we were interested to determine whether any of our hypothesised mediators had a role in mediating this relationship. We first conducted a set of bootstrapped regression analyses to determine the extent to which CNS narcissism was able to predict the hypothesised mediators: affective empathy, cognitive empathy, a need for power, and callous-unemotional traits individually while controlling for impression management. Though CNS narcissism was not a significant predictor of affective empathy, cognitive empathy, or callous-unemotional traits, it was a significant predictor of a need for power (Figure 2).

We conducted another bootstrapped regression analysis to determine the extent to which CNS narcissism was able to predict bullying while controlling for our potential mediators: affective empathy, cognitive empathy, callous-unemotional traits, need for power, and impression management. We found that with these variables entered into a single model CNS narcissism was no longer a significant predictor of bullying; only need for power remained a significant predictor of bullying (Figure 2). The variance in bullying previously explained by CNS narcissism was largely accounted for by a need for power.

Finally we ran PROCESS for SPSS (Hayes, 2013) to examine the extent to which affective empathy, cognitive empathy, callous unemotional traits and need for power were mediating the relationship between CNS narcissism and bullying (controlling for the effect of impression management). Though PROCESS for SPSS was able to run the previous regressions we used it only to determine the significance of indirect effects because this is the only part of the multiple mediation model in which PROCESS uses bootstrapping techniques. Using PROCESS we found that only the indirect effect via need for power was significant ($B = .072$, $SE = .028$, $95\% CI = .024 / .134$). The relationship between CNS

narcissism and bullying is largely mediated to a significant degree by a need for power.

The relationship between maladaptive narcissism and bullying. Figure 3 depicts the second multiple mediation model we were interested in testing and the results of each stage of testing that model (the number of participants that completed the NPIC = 111).



Note: Confidence intervals in brackets; reported coefficients are unstandardized; * significant at 95% bootstrap confidence interval ** significant at 99% bootstrap confidence interval

Figure 3. Bootstrapped regression analyses for maladaptive narcissism

We first conducted a bootstrapped regression analysis to determine whether bullying was predicted by maladaptive narcissism as measured by the relevant subscale of the NPIC while controlling for impression management. In accordance with recent previous research we found maladaptive narcissism to be a significant predictor of bullying.

Maladaptive narcissism was predictive of bullying and we next tested whether any of our potential mediators might be able to account for this

relationship to some degree. We conducted a second set of bootstrapped regression analyses to determine the extent to which maladaptive narcissism was able to predict affective empathy, cognitive empathy, a need for power, and callous-unemotional traits individually while controlling for impression management. Maladaptive narcissism was a significant predictor of affective empathy, cognitive empathy, callous-unemotional traits, and need for power. We found that maladaptive narcissism was predictive of all of our potential mediators, which raised the possibility of them mediating the relationship between maladaptive narcissism and bullying (Figure 3).

We conducted another bootstrapped regression analysis to determine the extent to which maladaptive narcissism was able to predict bullying while controlling for our potential mediators: affective empathy, cognitive empathy, callous-unemotional traits, need for power, and impression management. We found that with these variables entered into a single model maladaptive narcissism was no longer a significant predictor of bullying; within this model only need for power was a significant predictor of bullying (Figure 3). In much the same way as with adaptive narcissism, the variance in bullying previously explained by maladaptive narcissism seemed to be largely accounted for by a need for power.

Finally we ran PROCESS for SPSS to examine the extent to which affective empathy, cognitive empathy, callous unemotional traits and need for power were mediating the relationship between maladaptive narcissism and bullying (controlling for the effect of impression management). We found that only need for power significantly mediated the effect of maladaptive narcissism on bullying ($B = .134$, $SE = .143$, $95\% CI = .069 / 1.049$).

Our main hypothesis was supported by our results in that maladaptive narcissism was demonstrated to be predictive of bullying. In addition we found unexpectedly that adaptive narcissism as measured by the CNS was also predictive of bullying. The relationship between forms of narcissism and bullying

were not mediated by forms of empathy, instead they were strongly mediated by a need for power.

Gender differences. We found that the relationship between adaptive narcissism and bullying was borne out for both boys ($B = .122$, $t(129) = 2.186$, 99% CI = .002 / .290) and girls ($B = .113$, $t(160) = 2.977$, 99% CI = .003 / .277). We also found that the relationship between maladaptive narcissism and bullying was borne out for both boys ($B = 1.964$, $t(34) = 3.8$, 99% CI = .147 / 3.649) and girls ($B = .681$, $t(43) = 1.893$, 99% CI = .002 / 1.925). There was a relationship between both forms of narcissism and bullying for both male and female participants.

Discussion

Our aim in the present study was to identify a key personality trait, narcissism, that might predict bullying in adolescence. Our aim was also to understand the mechanisms through which narcissism and bullying might be linked. Our hope was that, by understanding this relationship and its relevant mechanisms we could provide information that could help researchers and educational practitioners to design more targeted interventions and target current interventions more effectively.

Our results contribute a number of novel findings to the small but quickly expanding field of research investigating the link between narcissism and bullying in adolescents. One of our primary findings was that maladaptive narcissism is predictive of bullying, which is supportive of previous recent findings in the field (e.g. Fanti & Kimonis, 2012; Stellwagen & Kerig, 2012). Another of our primary findings was that adaptive narcissism predicted adolescent bullying. This finding is the first of its kind and is particularly surprising in the context of dominant views of adaptive narcissism as positively regarded, being related to self-confidence, self-sufficiency, leadership, and assertiveness (Twenge & Foster, 2008). The relationship between both forms of narcissism and bullying remained strong for both male and female participants when they were separated in the analysis.

Our findings also demonstrate that low affective empathy is related to bullying in adolescence. This supports previous research in the field that had highlighted the ability to feel what another person might be experiencing to protect against engaging in bullying behaviour because it would cause bullies to experience the emotional pain of their potential victims (Jolliffe & Farrington, 2006, 2011; Ang & Goh, 2010; Gini, et al., 2007; Stavrinides, et al., 2010; Wolke, et al., 2000).

We found that low cognitive empathy is also related to bullying in adolescence. This finding is unexpected and contradicts some previous research in the field that identified cognitive empathy to be positively related to bullying (Caravita, et al., 2009; Yeo, et al., 2011). This relationship has been understood as being due to bullies being more effective at engaging in bullying behaviour if they are able to predict the consequences of their actions and can therefore optimise their actions for the greatest personal gain (Cook, et al., 2010; Peeters, et al., 2010). In our sample we have found the opposite effect: those with a greater ability to know what the impact of their bullying behaviour would be were less likely to engage in that behaviour. As cognitive empathy has been found to moderate the relationship between narcissism and bullying in the past (Stellwagen & Kerig, 2012) it is possible that our sample were broadly less narcissistic than those used in the cited research resulting in an inverse relationship being identified between cognitive empathy and bullying.

Our findings extend previous research in the field by demonstrating that though affective and cognitive empathy are both related to both forms of narcissism and bullying, they do not mediate the relationship between either form of narcissism and bullying. This study is the first to examine the potential for such a mediating role. However these results contradict our predictions made on the basis of past research that had highlighted the possibility that the low communal focus of narcissists reduced their experienced affective empathy, which removed the protective factor barring their engaging in bullying behaviour (Vonk, et al., 2012). Though affective empathy was inversely related to bullying and thus may

well provide a protective factor against an individual engaging in bullying behaviour, this is not the mechanism through which narcissists are more likely to engage in such behaviour.

Our research has identified that both adaptive and maladaptive narcissists are more likely to engage in bullying behaviour and that a need for power is a powerful mediator in both of these relationships. It appears that both adaptive and maladaptive narcissists have an increased need for power and that this is the motivational drive for their bullying behaviour. This mechanism has not been identified in previous empirical research but is theoretically consistent with models of bullying that identify a group of bullies motivated to engage in bullying by a need for power and dominance over others (Pellegrini & Bartini, 2001; Pellegrini & Long, 2002). We found that this is the case for both adaptive and maladaptive narcissists. Both adaptive and maladaptive narcissism necessitate the use of self-regulatory strategies to maintain an inflated sense of self and these have been shown to include antisocial behaviours (Morf & Rhodewalt, 2001). However, our finding shows that even those with high adaptive narcissism resort to antisocial behaviours in order to meet their need for power and dominance in mainstream secondary schools. It may be that bullying serves as a readily available source of power to those motivated to exploit it and even those with high adaptive narcissism, who would otherwise meet that need through more pro-social means by becoming role models and leaders, find themselves taking advantage of that abundant if less honourably acquired resource.

Our findings extend the previous literature by demonstrating that self-report measures of bullying are significantly influenced by the propensity of participants to manage other people's impression of them. Given that both a feature of maladaptive narcissism is the propensity to exploit others and that narcissism has been connected to Machiavellianism in past research (Wai & Tiliopoulos, 2012) we considered it likely that participants' propensity to manage other people's impression of them might have some impact on the honesty of their responses to sensitive questions about their bullying behaviour. We were surprised, however,

at how much of an impact participants' impression management had on the results; we showed that those scoring higher on impression management were less likely to complete bullying questionnaires and those that did were less likely to admit engaging in bullying behaviour. This finding demonstrates the need for researchers to ensure that they adequately control for such biases in research investigating bullying. The present study supports previous research that has found a relationship between narcissism and bullying without controlling for impression management (e.g. Fanti & Kimonis, 2012; Stellwagen & Kerig, 2012) by demonstrating that this relationship remains once the effect of impression management has been taken into account.

In accordance with previous research (e.g. Fanti & Kimonis, 2012), we also demonstrated that though both maladaptive narcissism and bullying are related to callous-unemotional traits, the relationship between maladaptive narcissism and bullying remains after controlling for the effect of this variable. Past research has highlighted the importance of callous-unemotional traits and a certain amount of overlapping variance between this and narcissism in predicting bullying (Kerig & Stellwagen, 2010), but our results support past research in identifying this to not be a mediating relationship.

The findings have a number of implications for educational practice. First, we found that both those with high adaptive and/or maladaptive narcissism have an increased likelihood of engaging in bullying behaviour during adolescence. This indicates that intervention in bullying may need to differ according to whether bullies are high in adaptive or maladaptive narcissism, or both.

Adaptive narcissism as a personality trait is considered generally positive and is related to desired attributes such as leadership, confidence and self-sufficiency (Raskin & Terry, 1988). Consequently, it would be counterproductive to attempt to reduce the narcissism of these individuals. However, even this relatively productive form of narcissism comes with a greater need for power and superiority, which can be met through anti-social means. It may be possible to

meet this need through pro-social means, and this is the route we believe intervention should take with more adaptive narcissists that are engaging in bullying. There are a number of interventions, such as peer tutoring (see Ginsburg-Block, Rohrbeck, Lavigne, & Fantuzzo, 2008), that give an individual an opportunity to be in a position of power and responsibility working towards pro-social and communal aims. The aim of such interventions in this instance would be to encourage the adaptively narcissistic individual to meet their need for power and superiority through pro-social means. For these individuals the need for intervention would be highlighted by their bullying behaviour.

With maladaptive narcissism the need for intervention should be highlighted before they engage in bullying behaviour, because maladaptive narcissism itself has been shown to be related to a number of negative outcomes in addition to bullying (Barry, et al., 2003). Thus we would recommend the measurement of narcissism in adolescents more broadly and use of that information in addition to teacher and parent report to identify groups of children that might benefit from a more communal focus. The route to intervention with maladaptive narcissists should not take the same approach as that with adaptive narcissists. Maladaptive narcissism is related to a sense of exhibitionism and propensity to exploit others for personal gain (Raskin & Terry, 1988), it is related to callous and unemotional traits and inversely related to forms of empathy in our sample. Giving these individuals power over other young people, even toward pro-social aims would place those young people at risk of being callously exploited. Maladaptive narcissism is seen as generally a negative personality trait, thus we consider that the route to intervention with maladaptive narcissists would be to reduce levels of narcissism in these individuals. Lower levels of narcissism should lead to a lessened need for power, which in turn should lead to reduced bullying. Campbell and Foster (2007) theorised that negative aspects of narcissism can be reduced by what they term a communal shift: the addition of communal traits such as feeling concern for others, warmth, and morality to the personalities of narcissists. Some recent research has found that this method can be of benefit to narcissists

(Finkel, et al., 2009) and that affective empathy can be induced in narcissists by inviting them to consciously take the perspective of another person (Hepper & Hart, 2010). There is a need for further research testing interventions such as these with adolescent narcissists to determine whether they can significantly reduce maladaptive narcissism and whether this will translate into reduced levels of bullying.

One of the challenges with our suggested approach is that maladaptive and adaptive narcissism are highly correlated. This correlation suggests that it might be difficult to neatly group narcissistic bullies into adaptive and maladaptive types. Further research will be necessary to test methods of effectively targeting different interventions for different types of narcissistic bully, but we suggest that this research might focus on reliably identifying specifically maladaptive narcissistic traits such as the propensity to exploit others. Our suggestion is that the presence of high maladaptive narcissism on a measure such as the NPIC would preclude individuals from participating in interventions designed for those with high adaptive narcissism. Our hope would be that the aforementioned interventions for maladaptive narcissism could be employed to all those young people found to be high on that trait, and those found to have high adaptive and maladaptive narcissism could engage in the adaptive narcissism intervention once their more maladaptive traits have subsided. Our sample had a strong prevalence of young people from year 7, having recently transitioned from primary school. These young people are particularly likely to engage in bullying behaviour as they establish their dominance in new social hierarchies (Pellegrini & Long, 2002). Thus early intervention could be employed at the first sign of interpersonal aggression to prevent those that might be future leaders becoming bullies at all.

Our research has also highlighted a number of other avenues for future investigation in research. The first of these is to investigate the unexpected behaviour of the CNS with this sample. When the scale was originally created and validated for use with adolescents Thomaes et al. (2008) found that it captured both a lack of communal focus and the presence of an agentic self-focus.

However, Thomaes et al. found that the correlation between the CNS and a low communal focus was much weaker in magnitude than between the CNS and an agentic self-focus. Our results highlight that this measure, as well as failing to capture the low communal focus associated with maladaptive narcissism, also fails to capture the callous-unemotional traits and low affective empathy also often associated with maladaptive narcissism (e.g. Muñoz, et al., 2011; Wai & Tiliopoulos, 2012). Our study also found that the maladaptive narcissism subscale of the NPIC was not able to predict scores on the CNS while the adaptive narcissism subscale was able to, leading us to deduce that the CNS was measuring adaptive narcissism in this sample. This deduction is supported to some extent by the CNS's original validation study (Thomaes, et al., 2008), which found using a principal component analysis a single-factor solution for the scale. The construct of narcissism is often considered to have two highly correlated components and a principal component analysis of the original NPI found seven first order components, three of which were aspects of adaptive narcissism and four of which were aspects of maladaptive narcissism (Raskin & Terry, 1988). Thus the single-factor solution of the CNS supports our deduction that this measure captures only adaptive narcissism. Further research is needed to determine the extent to which this is the case.

One of the main limitations of our study is that it was conducted within a single secondary school in the south of England. This school is unlikely to be able to reflect the diversity of schools in England in terms of the socio-economic status of the local population, the average level of narcissism of the attending pupils, the level of endorsement of individualism or the extent to which the school engenders an anti-bullying ethos or engages in anti-bullying intervention. Schools with a greater endorsement of individualism and with greater levels of narcissism may have social norms that permit greater levels of interpersonal aggression and bullying. It is likely that our findings may be exaggerated in such schools. Conversely, our findings may be unable to be replicated in schools that engender a communal focus in their students, have strong anti-bullying policies and

interventions, and have a lower level of narcissism in their students. It would be particularly interesting to see whether, in the presence of strong anti-bullying ethea and interventions, those with high adaptive narcissism find a way to meet their need for power other than through bullying. Consequently, the novel findings of this study require replication in other schools and on a wider scale to ensure that they are generalisable to the wider adolescent population.

Another limitation of the present study is that scores on impression management were able to predict whether or not a participant had filled out the bullying measure. We did not impute the missing data because we had such a large dataset and the number of participants missing a bullying measure was comparatively small but this did leave us with a mildly self-selected sample. This poses a problem for bootstrapping methods because the technique estimates the population distribution using the available data (Ader, et al., 2008). Consequently, data that is missing systematically will bias the estimated distribution and leave it a little less representative of the actual population distribution it is estimating. Our findings were particularly strong and the mildly self-selected sample is unlikely to have impacted the results to any great degree, particularly as we controlled for impression management scores at each stage of the data analysis. Nonetheless, it will be important for future research in the field to be aware of the impact of impression management on self-report measures of bullying and that research should, where possible, supplement these measures with observations, teacher and peer report, and other more diverse sources of data. Teacher and peer report measures, particularly peer nomination measures, are likely to suffer from impression management bias less because the report from these individuals is not self-related and so will not be influenced by participants' self-perceptions (either explicitly or implicitly). Our reliance upon self-report measures is another limitation of the present study and future research should also incorporate the use of these more diverse methods in an effort to replicate and expand upon our research to ascertain the robustness of our findings.

Conclusion

In the present research we have identified that both adaptive and maladaptive narcissism is associated with increased bullying behaviour in secondary school. Our main finding was that a need for power mediated the relationship between bullying and both adaptive and maladaptive narcissism, a theoretically consistent finding. Even those exhibiting a form of narcissism associated with positive traits such as leadership, self-confidence, and self-sufficiency, had a greater need for power and were thus more likely to engage in bullying behaviours. It may be that bullying in secondary schools is such an abundant and easily acquired source of power that even those with high adaptive narcissism, with a need for such power, are seduced by its lure. Future research should focus on investigating further the relationship between narcissism, bullying, and a need for power in adolescence. We have identified a number of avenues for intervention with adaptively and maladaptively narcissistic bullies and future research should also focus on designing and testing interventions targeted toward these groups. Narcissism and bullying are substantial social problems and if we can intervene to stem the negative consequences of both then perhaps we can improve the lives of countless adolescent young people.

Appendix A1

Interpersonal Reactivity Index

Answered on a scale of 1 (does not describe me well) to 6 (describes me very well)

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate answer. READ EACH ITEM CAREFULLY BEFORE RESPONDING. You can leave questions blank if you don't want to answer them. Please answer as honestly as you can.

I often have tender, concerned feelings for people less fortunate than me.

I sometimes find it difficult to see things from the "other guy's" point of view.

Sometimes I don't feel very sorry for other people when they are having problems

I try to look at everybody's side of a disagreement before I make a decision.

When I see someone being taken advantage of, I feel kind of protective towards them.

I sometimes try to understand my friends better by imagining how things look from their perspective

Other people's misfortunes do not usually disturb me a great deal.

If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.

When I see someone being treated unfairly, I sometimes don't feel very much pity for them.

I am often quite touched by things that I see happen.

I believe that there are two sides to every question and try to look at them both.

I would describe myself as a pretty soft-hearted person.

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

When I'm upset at someone, I usually try to "put myself in his shoes" for a while.

Before criticising somebody, I try to imagine how I would feel if I were in their place.

Appendix A2

CNS

Please tick the answers that fit your opinion best.

Answered on a scale of 1 (Not true at all) to 6 (Completely true)

I think it's important to stand out.

Kids like me deserve something extra.

Without me, our class would be much less fun.

It often happens that other kids get the compliments that I actually deserve.

I love showing all the things I can do.

I am very good at making other people believe what I want them to believe.

I am a very special person.

I am a great example for other kids to follow.

I often succeed in getting admiration.

I like to think about how incredibly nice I am.

Appendix A3

Olweus Bully/Victim Questionnaire

We say a student is being bullied when another student, or several other students

- say mean and hurtful things, or make fun of him or her, or call him or her mean and hurtful names
- completely ignore or exclude him or her from their group of friends or leave him or her out of things on purpose
- hit, kick, push, shove around, or lock him or her inside a room
- tell lies or spread false rumors about him or her or send mean notes and try to make other students dislike him or her
- do other hurtful things like that

When we talk about bullying, these things happen more than just once, and it is difficult for the student being bullied to defend himself or herself. We also call it bullying when a student is teased more than just once in a mean or hurtful way.

But we do not call it bullying when the teasing is done in a friendly and playful way. Also, it is not bullying when two students of about equal strength or power argue or fight.

Please tick the answers that fit your opinion best.

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

	It has not happened in the past couple of months	Only once or twice	2 or 3 times a month	About once a week	Several times a week
How often have you taken part in bullying another student(s) at school in the past couple of months?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I called another student(s) mean names and made fun of or teased him or her in a hurtful way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I kept him or her out of things on purpose, excluded him or her from my group of friends, or completely ignored him or her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I hit, kicked, pushed, and shoved him or her around, or locked him or her indoors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I spread false rumours about him or her and tried to make others dislike him or her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I took money or other things from him or her or damaged his or her belongings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I threatened or forced him or her to do things he or she did not want to do.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I bullied him or her with mean or hurtful messages, calls or pictures, or in other ways on					

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

my mobile phone or over the Internet
(computer).

I bullied him or her with mean names or comments about his or her appearance or
behaviour.

- It has not happened in the past couple of months
- Only once or twice
- 2 or 3 times a month
- About once per week
- Several times per week

Has your class or homeroom teacher or any other teacher talked with you about
your bullying another student(s) at school in the past couple of months?

- I have not bullied another student(s) at school in the past couple of months
- No, they have not talked with me about it
- Yes, they have talked with me about it once
- Yes, they have talked with me about it several times

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

Has any adult at home talked with you about your bullying another student(s) at school in the past couple of months?

- I have not bullied another student(s) at school in the past couple of months
- No, they have not talked with me about it
- Yes, they have talked with me about it once
- Yes, they have talked with me about it several times

Do you think you could join in bullying a student whom you do not like?

- Yes
- Yes, maybe
- I do not know
- No, I do not think so
- No
- Definitely no

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

How do you usually react if you see or learn that a student your age is being bullied by another student(s)?

- I have never noticed that students my age have been bullied
- I take part in the bullying
- I do not do anything but I think the bullying is okay
- I just watch what goes on
- I do not do anything but I think I ought to help the bullied student
- I try to help the bullied student in one way or another

Appendix A4

UPPS

Please tick the answers that fit your opinion best.

Answered on a scale of 1 (Disagree strongly) to 6 (Agree strongly)

I have a reserved and cautious attitude toward life

I like to stop and think things over before I do them

I don't like to start a project until I know exactly how to proceed

I tend to value and follow a rational, "sensible" approach to things

I usually make up my mind through careful reasoning

I am a cautious person

Before I get into a new situation I like to find out what to expect from it

I usually think carefully before doing anything

Before making up my mind, I consider all the advantages and disadvantages

I have trouble controlling my impulses

I often get involved in things I later wish I could get out of

When I feel bad, I will often do things I later regret in order to make myself feel better now

Sometimes when I feel bad, I can't seem to stop what I am doing even though it is making me feel worse

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

When I am upset I often act without thinking

I often make matters worse because I act without thinking when I am upset

In the heat of an argument, I will often say things that I later regret

Sometimes I do things on impulse that I later regret

Appendix A5

BIDR

Please tick the answers that fit your opinion best.

Answered on a scale of 1 (Disagree strongly) to 6 (Agree strongly)

I sometimes tell lies if I have to.

I never cover up my mistakes.

There have been occasions when I have taken advantage of someone

I sometimes try to get even rather than forgive and forget.

I have said something bad about a friend behind his or her back.

When I hear people talking privately, I avoid listening.

I never take things that don't belong to me.

I don't gossip about other people's business.

Appendix A6

CU Traits

Please tick the answers that fit your opinion best.

Answered on a scale of 1 (Not true at all) to 6 (Definitely true)

I care about how well I do at school or work

I do not care about being on time

I do not care about doing things well

I always try my best

I do not like putting time into doing things well

I work hard on everything I do

I feel bad or guilty when I do something wrong

What I think is right and wrong is different from what other people think

I do not care if I get into trouble

I apologise to persons I hurt

I do not feel remorseful when I do something wrong

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

I do not show my emotions to others

I express my feelings openly

I do not let my feelings control me

It is easy for others to tell how I am feeling

I am very expressive and emotional

I hide my feelings from others

I am concerned about the feelings of others

I do not care who I hurt to get what I want

I seem very cold and uncaring to others

I try not to hurt others' feelings

The feelings of others are not important to me

I do things to make others feel good

Appendix A7

Need for Power

Answered on a scale of 1 (Strongly disagree) to 6 (Strongly agree)

1. At school, I like to exert power over people.
2. At school, I would like to be the leader of the class.
3. I like to control my classmates' opinions on things.
4. At school, it is important for me to feel powerful.
5. At school, I like to be in charge of any group I am in.
6. At school, I like to persuade others to do what I want them to do.

Appendix A8

NPIC

Read each pair of statements below and click the one that comes closest to describing your feelings and beliefs about yourself. You may feel that neither statement describes you well, but pick the one that comes closest. Please complete all pairs.

1. ___ I really like to be the centre of attention
 ___ It makes me uncomfortable to be the centre of attention
2. ___ I am no better or no worse than most people
 ___ I think I am a special person
3. ___ Everybody likes to hear my stories
 ___ Sometimes I tell good stories
4. ___ I usually get the respect that I deserve
 ___ I insist upon getting the respect that is due me
5. ___ I don't mind following orders
 ___ I like having authority over people
6. ___ I am going to be a great person
 ___ I hope I am going to be successful
7. ___ People sometimes believe what I tell them

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

- ___ I can make anybody believe anything I want them to
8. ___ I expect a great deal from other people
- ___ I like to do things for other people
9. ___ I like to be the centre of attention
- ___ I prefer to blend in with the crowd
10. ___ I am much like everybody else
- ___ I am an extraordinary person
11. ___ I always know what I am doing
- ___ Sometimes I am not sure of what I am doing
12. ___ I don't like it when I find myself manipulating people
- ___ I find it easy to manipulate people
13. ___ Being an authority doesn't mean that much to me
- ___ People always seem to recognize my authority
14. ___ I know that I am good because everybody keeps telling me so
- ___ When people compliment me I sometimes get embarrassed
15. ___ I try not to be a show off
- ___ I am apt to show off if I get the chance
16. ___ I am more capable than other people
- ___ There is a lot that I can learn from other people

Appendix B

Research Governance Approval



Mr Tom Sargeant
School of Psychology
University of Southampton
University Road
Highfield
Southampton
SO17 1BJ

RCO Ref: 8603

08 June 2012

Dear Mr Sargeant

Project Title Are Narcissistic Young People more Likely to Engage in Bullying in Secondary School and is Affective Empathy the Key to Helping them to Stop?

This is to confirm the University of Southampton is prepared to act as Research Sponsor for this study, and the work detailed in the protocol/study outline will be covered by the University of Southampton insurance programme.

As the sponsor's representative for the University this office is tasked with:

1. Ensuring the researcher has obtained the necessary approvals for the study
2. Monitoring the conduct of the study
3. Registering and resolving any complaints arising from the study

As the researcher you are responsible for the conduct of the study and you are expected to:

1. Ensure the study is conducted as described in the protocol/study outline approved by this office
2. Advise this office of any change to the protocol, methodology, study documents, research team, participant numbers or start/end date of the study
3. Report to this office as soon as possible any concern, complaint or adverse event arising from the study

Failure to do any of the above may invalidate the insurance agreement and/or affect sponsorship of your study i.e. suspension or even withdrawal.

On receipt of this letter you may commence your research but please be aware other approvals may be required by the host organisation if your research takes place outside the University. It is your responsibility to check with the host organisation and obtain the appropriate approvals before recruitment is underway in that location.

May I take this opportunity to wish you every success for your research.

Yours sincerely

A handwritten signature in black ink, appearing to read 'M Prude'.

Dr Martina Prude
Head of Research Governance

Tel: 023 8059 5058
email: rginfo@soton.ac.uk

Appendix C

Research Ethics Committee Approval

Your Ethics Submission (Ethics ID:2197) has been reviewed and approved

ERGO [DoNotReply@ERGO.soton.ac.uk]

To: Sargeant T.A.

Inbox

Thursday, June 07, 2012 9:38 AM

Submission Number: 2197

Submission Name: Are narcissistic young people more likely to engage in bullying in secondary school and is affective empathy the key to helping them to stop?

This is email is to let you know your submission was approved by the Ethics Committee.

Please note that you cannot begin your research before you have had positive approval from the University of Southampton Research Governance Office (RGO) and Insurance Services. You should receive this via email within two working weeks. If there is a delay please email rgoinfo@soton.ac.uk.

Comments

None

[Click here to view your submission](#)

ERGO : Ethics and Research Governance Online
<http://www.ergo.soton.ac.uk>

References

- Adèr, H. J., Mellenbergh G. J., & Hand, D. J. (2008). *Advising on research methods: A consultant's companion*. Huizen, The Netherlands: Johannes van Kessel Publishing. ISBN 978-90-79418-01-5
- Ang, R. P., & Goh, D. H. (2010). Cyberbullying among adolescents: The role of affective and cognitive empathy, and gender. *Child Psychiatry and Human Development, 41*(4), 387-397. doi: 10.1007/s10578-010-0176-3
- Ang, R. P., Ong, E. Y. L., Lim, J. C. Y., & Lim, E. W. (2010). From narcissistic exploitativeness to bullying behavior: The mediating role of approval-of-aggression beliefs. *Social Development, 19*(4), 721-735. doi: 10.1111/j.1467-9507.2009.00557.x
- Arseneault, L., Bowes, L., & Shakoor, S. (2010). Bullying victimization in youths and mental health problems: 'Much ado about nothing?'. *Psychological Medicine: A Journal of Research in Psychiatry and the Allied Sciences, 40*(5), 717-729. doi: 10.1017/s0033291709991383
- Barry, C. T., Frick, P. J., Adler, K. K., & Grafeman, S. J. (2007). The predictive utility of narcissism among children and adolescents: Evidence for a distinction between adaptive and maladaptive narcissism. *Journal Of Child And Family Studies, 16*(4), 508-521. doi:10.1007/s10826-006-9102-5
- Barry, C. T., Frick, P. J., & Killian, A. L. (2003). The relation of narcissism and self-esteem to conduct problems in children: A preliminary investigation. *Journal*

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

of Clinical Child and Adolescent Psychology, 32(1), 139-152. doi:

10.1207/15374420360533130

Barry, C. T., Grafeman, S. J., Adler, K. K., & Pickard, J. D. (2007). The relations among narcissism, self-esteem, and delinquency in a sample of at-risk adolescents. *Journal of Adolescence*, 30(6), 933-942. doi:

10.1016/j.adolescence.2006.12.003

Barry, C. T., Pickard, J. D., & Ansel, L. L. (2009). The associations of adolescent invulnerability and narcissism with problem behaviors. *Personality and Individual Differences*, 47(6), 577-582. doi: 10.1016/j.paid.2009.05.022

Baumeister, R. F., Bushman, B. J., & Campbell, W. K. (2000). Self-esteem, narcissism, and aggression: Does violence result from low self-esteem or from threatened egotism? *Current Directions in Psychological Science*, 9(1), 26-29. doi: 10.1111/1467-8721.00053

Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Review*, 103(1), 5-33. doi: 10.1037/0033-295X.103.1.5

Björkqvist, K., Lagerspetz, K. M., & Kaukiainen, A. (1992). Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. *Aggressive Behavior*, 18(2), 117-127. doi: 10.1002/1098-2337(1992)18:2<117::aid-ab2480180205>3.0.co;2-3

Boulton, M. J., Bucci, E., & Hawker, D. D. S. (1999). Swedish and English secondary school pupils' attitudes towards, and conceptions of, bullying:

Concurrent links with bully/victim involvement. *Scandinavian Journal of Psychology*, 40(4), 277-284. doi: 10.1111/1467-9450.404127

Boulton, M. J., & Smith, P. K. (1994). Bully/victim problems in middle-school children: Stability, self-perceived competence, peer perceptions and peer acceptance. *British Journal Of Developmental Psychology*, 12(3), 315-329. doi:10.1111/j.2044-835X.1994.tb00637.x

Branden, Nathaniel (1969). *The Psychology of Self-Esteem: A New Concept of Man's Psychological Nature*. Nash Publishing Corporation. pp. 1–2. ISBN 840211090

Buhs, E. S., Ladd, G. W., & Herald, S. L. (2006). Peer exclusion and victimization: Processes that mediate the relation between peer group rejection and children's classroom engagement and achievement? *Journal of Educational Psychology*, 98(1), 1-13. doi: 10.1037/0022-0663.98.1.1

Bukowski, W. M., Schwartzman, A., Santo, J., Bagwell, C., & Adams, R. (2009). Reactivity and distortions in the self: Narcissism, types of aggression, and the functioning of the hypothalamic-pituitary-adrenal axis during early adolescence. *Development and Psychopathology*, 21(4), 1249-1262. doi: 10.1017/s0954579409990149

Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence?. *Journal Of Personality And Social Psychology*, 75(1), 219-229. doi:10.1037/0022-3514.75.1.219

- Campbell, W. K., Bosson, J. K., Goheen, T. W., Lakey, C. E., & Kernis, M. H. (2007). Do Narcissists Dislike Themselves "Deep Down Inside"? *Psychological Science, 18*, 227-229. doi:10.1111/j.1467-9280.2007.01880.x
- Campbell, W. K., Bush, C. P., Brunell, A. B., & Shelton, J. (2005). Understanding the Social Costs of Narcissism: The Case of the Tragedy of the Commons. *Personality and Social Psychology Bulletin, 31*(10), 1358-1368. doi: 10.1177/0146167205274855
- Campbell, K.W. & Foster J.D. (2007). The Narcissistic Self: Background, an Extended Agency Model, and Ongoing Controversies. To appear in: C. Sedikides & S. Spencer (Eds.), *Frontiers in social psychology: The self*. Philadelphia, PA: Psychology Press.
- Caravita, S. C. S., Di Blasio, P., & Salmivalli, C. (2009). Unique and interactive effects of empathy and social status on involvement in bullying. *Social Development, 18*(1), 140-163. doi: 10.1111/j.1467-9507.2008.00465.x
- Cerezo, F., & Ato, M. (2005). Bullying in Spanish and English Pupils: A sociometric perspective using the BULL-S questionnaire. *Educational Psychology, 25*(4), 353-367. doi: 10.1080/01443410500041458
- Chamberlain, T., George, N., Golden, S., Walker, F. and Benton, T. (2010). *Tellus4 National Report (DCSF Research Report 218)*. London: DCSF.
- Chaux, E., Molano, A., & Podlesky, P. (2009). Socio-economic, socio-political and socio-emotional variables explaining school bullying: A country-wide multilevel analysis. *Aggressive Behavior, 35*(6), 520-529. doi: 10.1002/ab.20320

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

Cook, C. R., Williams, K. R., Guerra, N. G., Kim, T. E., & Sadek, S. (2010).

Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *School Psychology Quarterly*, *25*(2), 65-83.

doi:10.1037/a0020149

Craig, W. M., Pepler, D., & Atlas, R. (2000). Observations of bullying in the

playground and in the classroom. *School Psychology International*, *21*(1),

22-36. doi: 10.1177/0143034300211002

Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social

information-processing mechanisms in children's social adjustment.

Psychological Bulletin, *115*, 74–101.

Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-

psychological adjustment. *Child Development*, *66*(3), 710-722. doi:

10.2307/1131945

Crick, N. R., & Grotpeter, J. K. (1996). Children's treatment by peers: Victims of

relational and overt aggression. *Development and Psychopathology*, *8*,

367–380.

d'Acremont, M., & Van der Linden, M. (2007). How is impulsivity related to

depression in adolescence? Evidence from a French validation of the

cognitive emotion regulation questionnaire. *Journal of Adolescence*, *30*(2),

271-282. doi: 10.1016/j.adolescence.2006.02.007

Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a

multidimensional approach. *Journal of Personality and Social Psychology*,

44(1), 113-126. doi: 10.1037/0022-3514.44.1.113

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

- Demko, L. (1996). Bullying at school: The no-blame approach. *Health Education, 96*(1), 26-30. doi: 10.1108/09654289610105392
- Dewall, C. N., Macdonald, G., Webster, G. D., Masten, C. L., Baumeister, R. F., Powell, C., . . . Eisenberger, N. I. (2010). Acetaminophen reduces social pain: behavioral and neural evidence. *Psychological Science, 21*(7), 931-937. doi: 10.1177/0956797610374741
- Dodge, K. A., & Coie, J.D. (1987). Social-information-processing factors in reactive and proactive aggression in children's peer groups. *Journal of Personality and Social Psychology, 53*, 1146–1158.
- Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., Moffitt, T. E., & Caspi, A. (2005). Low Self-Esteem Is Related to Aggression, Antisocial Behavior, and Delinquency. *Psychological Science, 16*(4), 328-335. doi: 10.1111/j.0956-7976.2005.01535.x
- Drewery, W. (2007). Restorative Practices in Schools: Far-Reaching Implications. In G. Maxwell & J. H. Liu(eds), *Restorative Justice and Practices in New Zealand* (pp. 199-213). Wellington, New Zealand: Institute of Policy Studies. Retrieved from:
<http://researchcommons.waikato.ac.nz/bitstream/handle/10289/3345/Restpractive%20practices.pdf?sequence=1>
- Dukes, R. L., Stein, J. A., & Zane, J. I. (2009). Effect of relational bullying on attitudes, behavior and injury among adolescent bullies, victims and bully-victims. *The Social Science Journal, 46*(4), 671-688. doi: 10.1016/j.soscij.2009.05.006

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

- Egan, V., & Lewis, M. (2011). Neuroticism and agreeableness differentiate emotional and narcissistic expressions of aggression. *Personality and Individual Differences, 50*(6), 845-850. doi: 10.1016/j.paid.2011.01.007
- Estévez, E., Murgui, S., & Musitu, G. (2009). Psychological adjustment in bullies and victims of school violence. *European Journal of Psychology of Education, 24*(4), 473-483. doi: 10.1007/BF03178762
- Fanti, K. A., & Kimonis, E. R. (2012). Bullying and Victimization: The Role of Conduct Problems and Psychopathic Traits. *Journal of Research on Adolescence, 22*(4), 617-631. doi: 10.1111/j.1532-7795.2012.00809.x
- Ferguson, C. J., San Miguel, C., Kilburn, J. C., Jr., & Sanchez, P. (2007). The effectiveness of school-based anti-bullying programs: A meta-analytic review. *Criminal Justice Review, 32*(4), 401-414. doi: 10.1177/0734016807311712
- Finkel, E., Campbell, W., Buffardi, L., Kumashiro, M., & Rusbult, C. (2009). The metamorphosis of narcissus: communal activation promotes relationship commitment among narcissists. *Personality & Social Psychology Bulletin, 35*(10), 1271-1284. doi:10.1177/0146167209340904
- Fossati, A., Borroni, S., Eisenberg, N., & Maffei, C. (2010). Relations of proactive and reactive dimensions of aggression to overt and covert narcissism in nonclinical adolescents. *Aggressive Behavior, 36*(1), 21-27. doi: 10.1002/ab.20332
- Frick, P.J. (2004). *The Inventory of Callous–Unemotional Traits*. Unpublished rating scale.

- Frick, P. J., & Hare, R. D. (2001). *The Antisocial Process Screening Device*. Toronto, Ontario, Canada: Multi-Health Systems.
- Frisén, A., Holmqvist, K., & Oscarsson, D. (2008). 13-year-olds' perception of bullying: Definitions, reasons for victimisation and experience of adults' response. *Educational Studies*, *34*(2), 105-117. doi: 10.1080/03055690701811149
- Gini, G., Albiero, P., Benelli, B., & Altoè, G. (2007). Does empathy predict adolescents' bullying and defending behavior? *Aggressive Behavior*, *33*(5), 467-476. doi: 10.1002/ab.20204
- Ginsburg-Block, M., Rohrbeck, C., Lavigne, N., & Fantuzzo, J. W. (2008). Peer-assisted learning: An academic strategy for enhancing motivation among diverse students. In C. Hudley, A. Gottfried (Eds.) , *Academic motivation and the culture of school in childhood and adolescence* (pp. 247-273). New York, NY US: Oxford University Press.
doi:10.1093/acprof:oso/9780195326819.003.0011
- Glombiewski, J. A., Hartwich-Tersek, J., & Rief, W. (2010). Depression in chronic back pain patients: Prediction of pain intensity and pain disability in cognitive-behavioral treatment. *Psychosomatics: Journal of Consultation Liaison Psychiatry*, *51*(2), 130-136.
- Golmaryami, F. N., & Barry, C. T. (2010). The associations of self-reported and peer-reported relational aggression with narcissism and self-esteem among adolescents in a residential setting. *Journal of Clinical Child and Adolescent Psychology*, *39*(1), 128-133. doi: 10.1080/15374410903401203

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, 102, 4-27.
- Greenwald, A. G., & Farnham, S. D. (2000). Using the Implicit Association Test to measure self-esteem and self-concept. *Journal of Personality and Social Psychology*, 79(6), 1022-1038. doi: 10.1037/0022-3514.79.6.1022
- Greenwald, A. G., Poehlman, T., Uhlmann, E., & Banaji, M. R. (2009). Understanding and using the Implicit Association Test: III. Meta-analysis of predictive validity. *Journal Of Personality And Social Psychology*, 97(1), 17-41. doi:10.1037/a0015575
- Griffin, R. S., & Gross, A. M. (2004). Childhood bullying: Current empirical findings and future directions for research. *Aggression And Violent Behavior*, 9(4), 379-400. doi:10.1016/S1359-1789(03)00033-8
- Hart, C. M., Ritchie, T., Hepper, E. G. D., & Gebauer, J. (under review). The Balanced Inventory of Desirable Responding Short Form (BIDR-16). *Journal of Research in Personality*.
- Harter, S. 2006. "The self". In Handbook of child psychology: Vol. 3. Social, emotional, and personality development , Edited by: Damon, W., Lerner, R. M. and Eisenberg, N. 505–570. New York: Wiley.
- Hartung, C. M., Little, C. S., Allen, E. K., & Page, M. C. (2011). A psychometric comparison of two self-report measures of bullying and victimization: Differences by sex and grade. *School Mental Health*, 3(1), 44-57. doi: 10.1007/s12310-010-9046-1

Hayes, A. (2013). *Introduction to Mediation, Moderation, and Conditional Process*

Analysis: A Regression-Based Approach. The Guildford Press, New York.

Hepper, E. G., & Hart, C. M. (2010, September). *Can narcissists be empathic?*

BPS Social Psychological Section Conference, Winchester, UK.

Hogan, R. (1969). Development of an empathy scale. *Journal of Consulting and*

Clinical Psychology, 33, 307-316.

Jolliffe, D., & Farrington, D. P. (2006). Examining the Relationship Between Low

Empathy and Bullying. *Aggressive Behavior*, 32(6), 540-550. doi:

10.1002/ab.20154

Jolliffe, D., & Farrington, D. P. (2011). Is low empathy related to bullying after

controlling for individual and social background variables? *Journal of*

Adolescence, 34(1), 59-71. doi: 10.1016/j.adolescence.2010.02.001

Juvonen, J., Nishina, A., & Graham, S. (2000). Peer harassment, psychological

adjustment, and school functioning in early adolescence. *Journal of*

Educational Psychology, 92(2), 349-359. doi: 10.1037/0022-0663.92.2.349

Kerig, P. K., & Stellwagen, K. K. (2010). Roles of Callous-Unemotional Traits,

Narcissism, and Machiavellianism in Childhood Aggression. *Journal of*

Psychopathology and Behavioral Assessment, 32(3), 343-352. doi:

10.1007/s10862-009-9168-7

Kirschner, D. (1992). Understanding adoptees who kill: Dissociation, patricide, and

the psychodynamics of adoption. *International Journal of Offender Therapy*

and Comparative Criminology. 36, 323-333.

- Klomek, A. B., Sourander, A., & Gould, M. (2010). The association of suicide and bullying in childhood to young adulthood: A review of cross-sectional and longitudinal research findings. *The Canadian Journal of Psychiatry, 55*(5), 282-288.
- Kokkinos, C. M., & Panayiotou, G. (2004). Predicting bullying and victimization among early adolescents: Associations with disruptive behavior disorders. *Aggressive Behavior, 30*(6), 520-533. doi: 10.1002/ab.20055
- Kross, E., Berman, M. G., Mischel, W., Smith, E. E., & Wager, T. D. (2011). Social rejection shares somatosensory representations with physical pain. *PNAS Proceedings of the National Academy of Sciences of the United States of America, 108*(15), 6270-6275. doi: 10.1073/pnas.1102693108
- Kyriakides, L., Kaloyirou, C., & Lindsay, G. (2006). An analysis of the Revised Olweus Bully/Victim Questionnaire using the Rasch measurement model. *British Journal of Educational Psychology, 76*(4), 781-801. doi: 10.1348/000709905x53499
- Lagerspetz, K. M., Björkqvist, K., & Peltonen, T. (1988). Is indirect aggression typical of females? Gender differences in aggressiveness in 11- to 12-year-old children. *Aggressive Behavior, 14*(6), 403-414. doi: 10.1002/1098-2337(1988)14:6<403::aid-ab2480140602>3.0.co;2-d
- Lau, K. S. L., Marsee, M. A., Kunimatsu, M. M., & Fassnacht, G. M. (2011). Examining Associations Between Narcissism, Behavior Problems, and Anxiety in Non-Referred Adolescents. *Child & Youth Care Forum, 40*(3), 163-176. doi: 10.1007/s10566-010-9135-1

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

- Little, T. D., Jones, S. M., Henrich, C. C., & Hawley, P. H. (2003). Disentangling the 'whys' from the 'whats' of aggressive behaviour. *International Journal Of Behavioral Development, 27*(2), 122-133. doi:10.1080/01650250244000128
- Long, D. E. (1990). *The anatomy of terrorism*. New York: Free Press. ISBN 978-0029193457
- Marini, Z. A., Dane, A. V., Bosacki, S. L., & Ylc, C. (2006). Direct and indirect bully-victims: Differential psychosocial risk factors associated with adolescents involved in bullying and victimization. *Aggressive Behavior, 32*(6), 551-569. doi: 10.1002/ab.20155
- Marsee, M. A., Silverthorn, P., & Frick, P. J. (2005). The association of psychopathic traits with aggression and delinquency in non-referred boys and girls. *Behavioral Sciences & the Law, 23*(6), 803-817. doi: 10.1002/bsl.662
- Marsh, H. W. (1990). *Self-Description Questionnaire – II manual*. Sydney: University of Western Sydney.
- Maslow, A. H., (1970) *Motivation and Personality*, 2nd. ed., New York, Harper & Row, ISBN 0060419873
- Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personality, 40*(4), 525-543. doi: 10.1111/j.1467-6494.1972.tb00078.x
- Meltzer, H., Vostanis, P., Ford, T., Bebbington, P., & Dennis, M. (2011). Victims of bullying in childhood and suicide attempts in adulthood. *European Psychiatry: The Journal Of The Association Of European Psychiatrists, 26*(8), 498-503. doi:10.1016/j.eurpsy.2010.11.006

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

- Morf, Carolyn C., & Rhodewalt, Frederick. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry, 12*(4), 177-196. doi: 10.1207/S15327965PLI1204_1
- Morrison, B. E. (2006). *Restoring safe school communities: A whole school response to bullying, violence and alienation*. Sydney : Federation Press
- Muñoz, L. C., Qualter, P., & Padgett, G. (2011). Empathy and bullying: Exploring the influence of callous-unemotional traits. *Child Psychiatry and Human Development, 42*(2), 183-196. doi: 10.1007/s10578-010-0206-1
- Nickerson, A. B., Mele, D., & Princiotta, D. (2008). Attachment and empathy as predictors of roles as defenders or outsiders in bullying interactions. *Journal of School Psychology, 46*(6), 687-703. doi: 10.1016/j.jsp.2008.06.002
- Nishina, A., Juvonen, J., & Witkow, M. R. (2005). Sticks and Stones May Break My Bones, but Names Will Make Me Feel Sick: The Psychosocial, Somatic, and Scholastic Consequences of Peer Harassment. *Journal of Clinical Child and Adolescent Psychology, 34*(1), 37-48. doi: 10.1207/s15374424jccp3401_4
- Noel, J. G., Wann, D. L., & Branscombe, N. R. (1995). Peripheral ingroup membership status and public negativity toward outgroups. *Journal of Personality and Social Psychology, 68*(1), 127-137. doi:10.1037/0022-3514.68.1.127
- Nordgren, L. F., Banas, K., & MacDonald, G. (2011). Empathy gaps for social pain: Why people underestimate the pain of social suffering. *Journal of*

Personality and Social Psychology, 100(1), 120-128. doi:

10.1037/a0020938

Ojala, K., & Nesdale, D. (2004). Bullying and social identity: The effects of group norms and distinctiveness threat on attitudes towards bullying. *British Journal of Developmental Psychology*, 22(1), 19-35. doi:

10.1348/026151004772901096

Ojanen, T., Findley, D., & Fuller, S. (2012). Physical and Relational Aggression in Early Adolescence: Associations with Narcissism, Temperament, and Social Goals. *Aggressive Behavior*, 38(2), 99-107. doi: 10.1002/ab21413

Oluyinka, O. A. (2008). Social-psychological factors associated with bullying behavior among secondary school students. *Journal of Psychology in Africa*, 18(2), 269-274.

Olweus, D. (1978). *Aggression in the schools: Bullies and whipping boys*. New York: Wiley.

Olweus, D. (1996). *The revised Olweus Bully/Victim Questionnaire*. Unpublished material. Bergen, Norway: Research Center for Health Promotion (HEMIL), Christies gate 13, N-5015 Bergen, Norway.

Olweus, D. (1999). Sweden. In Smith, P. K., Morita, Y., Junger-Tas, J., Olweus, D., Catalano, R. & Slee, P. (Eds) *The nature of school bullying: A cross-national perspective* (pp. 7–27). London & New York: Routledge.

Onishi, A., Kawabata, Y., Kurokawa, M., & Yoshida, T. (2012). A mediating model of relational aggression, narcissistic orientations, guilt feelings, and

perceived classroom norms. *School Psychology International*, 33(4), 367-390. doi: 10.1177/0143034311421433

- Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver & L. S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes* (pp. 17-59). San Diego, CA: Academic Press.
- Peeters, M., Cillessen, A. N., & Scholte, R. J. (2010). Clueless or powerful? Identifying subtypes of bullies in adolescence. *Journal Of Youth And Adolescence*, 39(9), 1041-1052. doi:10.1007/s10964-009-9478-9
- Pellegrini, A. D., & Bartini, M. (2001). Dominance in early adolescent boys: Affiliative and aggressive dimensions and possible functions. *Merrill-Palmer Quarterly: Journal of Developmental Psychology*, 47(1), 142-163. doi: 10.1353/mpq.2001.0004
- Pellegrini, A. D., & Long, J. D. (2002). A longitudinal study of bullying, dominance, and victimization during the transition from primary school through secondary school. *British Journal of Developmental Psychology*, 20(2), 259-280. doi: 10.1348/026151002166442
- Pollastri, A. R., Cardemil, E. V., & O'Donnell, E. H. (2010). Self-Esteem in Pure Bullies and Bully/Victims: A Longitudinal Analysis. *Journal of Interpersonal Violence*, 25(8), 1489-1502. doi: 10.1177/0886260509354579
- Raine, A., Dodge, K., Loeber, R., Gatzke-Kopp, L., Lynam, D., Reynolds, C., & ... Liu, J. (2006). The reactive-proactive aggression questionnaire: Differential

correlates of reactive and proactive aggression in adolescent boys.

Aggressive Behavior, 32(2), 159-171. doi:10.1002/ab.20115

Rappaport, N., & Thomas, C. (2004). Recent research findings on aggressive and violent behavior in youth: Implications for clinical assessment and intervention. *Journal of Adolescent Health*, 35(4), 260-277. doi: 10.1016/j.jadohealth.2003.10.009

Raskin, R. N., & Hall, C. S. (1979). A narcissistic personality inventory.

Psychological Reports, 45, 590.

Raskin, R., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology*, 54(5), 890-902. doi: 10.1037/0022-3514.54.5.890

Rigby, K. & Slee, P.T., (1995). *Manual for the Peer Relations Questionnaire (PRQ)*, University of South Australia, Adelaide.

Riva, P., Wirth, J. H., & Williams, K. D. (2011). The consequences of pain: The social and physical pain overlap on psychological responses. *European Journal of Social Psychology*, 41(6), 681-687. doi: 10.1002/ejsp.837

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Rueger, S. Y., Malecki, C. K., & Demaray, M. K. (2011). Stability of peer victimization in early adolescence: Effects of timing and duration. *Journal of School Psychology*, 49(4), 443-464. doi: 10.1016/j.jsp.2011.04.005

SELF-CONCEPT AND AGGRESSION IN ADOLESCENCE

- Salmivalli, C. (2001). Feeling good about oneself, being bad to others? Remarks on self-esteem, hostility, and aggressive behavior. *Aggression and Violent Behavior, 6*(4), 375-393. doi: 10.1016/s1359-1789(00)00012-4
- Sandstrom, M. J., & Jordan, R. (2008). Defensive self-esteem and aggression in childhood. *Journal of Research in Personality, 42*(2), 506-514. doi: 10.1016/j.jrp.2007.07.008
- Sansone, R. A., Lam, C., & Wiederman, M. W. (2013). Victims of bullying in childhood, criminal outcomes in adulthood. *International Journal of Psychiatry in Clinical Practice, 17*(1), 69-72. doi: 10.3109/13651501.2012.693185
- Schwartz, D., Gorman, A. H., Nakamoto, J., & Toblin, R. L. (2005). Victimization in the Peer Group and Children's Academic Functioning. *Journal of Educational Psychology, 97*(3), 425-435. doi: 10.1037/0022-0663.97.3.425
- Seah, S. L., & Ang, R. P. (2008). Differential correlates of reactive and proactive aggression in Asian adolescents: Relations to narcissism, anxiety, schizotypal traits, and peer relations. *Aggressive Behavior, 34*(5), 553-562. doi: 10.1002/ab.20269
- Seals, D., & Young, J. (2003). Bullying and victimization: Prevalence and relationship to gender, grade level, ethnicity, self-esteem, and depression. *Adolescence, 38*(152), 735-747.
- Smith, P. K., & Shu, S. (2000). What good schools can do about bullying - Findings from a survey in English schools after a decade of research and

action. *Childhood-a Global Journal of Child Research*, 7(2), 193-212. doi:
10.1177/0907568200007002005

Smith, P. K., Cowie, H., Olafsson, R. F., Liefoghe, A. P. D., Almeida, A., Araki, H., . . . Wenxin, Z. (2002). Definitions of bullying: A comparison of terms used, and age and gender differences, in a fourteen-country international comparison. *Child Development*, 73(4), 1119-1133. doi: 10.1111/1467-8624.00461

Smith, J. D., Schneider, B., Smith, P. K., & Ananiadou, K. (2004). The effectiveness of wholeschool anti-bullying programs: A synthesis of evaluation research. *School Psychology Review*, 33, 548-561.

Stavrinides, P., Georgiou, S., & Theofanous, V. (2010). Bullying and empathy: A short-term longitudinal investigation. *Educational Psychology*, 30(7), 793-802. doi: 10.1080/01443410.2010.506004

Stellwagen, K. K., & Kerig, P. K. (2012). Ringleader bullying: Association with psychopathic narcissism and theory of mind among child psychiatric inpatients. *Child Psychiatry And Human Development*, doi:10.1007/s10578-012-0355-5

Strohmeier, D., Spiel, C., & Gradinger, P. (2008). Social relationships in multicultural schools: Bullying and victimization. *European Journal of Developmental Psychology*, 5(2), 262-285. doi:
10.1080/17405620701556664

- Sutton, J., Smith, P. K., & Swettenham, J. (1999). Social cognition and bullying: Social inadequacy or skilled manipulation? *British Journal of Developmental Psychology, 17*, 435–450.
- Tajfel, H. (2010). The social psychology of minorities. In T. Postmes & N. R. Branscombe (Eds.), *Rediscovering social identity*. (pp. 143-172). New York, NY US: Psychology Press.
- Thomaes, S., Bushman, B. J., de Castro, B. O., Cohen, G. L., & Denissen, J. J. A. (2009). Reducing narcissistic aggression by buttressing self-esteem: An experimental field study. *Psychological Science, 20*(12), 1536-1542. doi: 10.1111/j.1467-9280.2009.02478.x
- Thomaes, S., Bushman, B. J., Stegge, H., & Olthof, T. (2008). Trumping shame by blasts of noise: Narcissism, self-esteem, shame, and aggression in young adolescents. *Child Development, 79*(6), 1792-1801. doi: 10.1111/j.1467-8624.2008.01226.x
- Thomaes, S., Stegge, H., & Olthof, T. (2007). Externalizing shame responses in children: The role of fragile-positive self-esteem. *British Journal of Developmental Psychology, 25*, 559-577. doi: 10.1348/026151007x173827
- Thomaes, S., Stegge, H., Bushman, B., Olthof, T., & Denissen, J. (2008). Development and Validation of the Childhood Narcissism Scale, *Journal of Personality Assessment, 90*(4), 382-391
- Thornberg, R., & Knutsen, S. (2011). Teenagers' explanations of bullying. *Child & Youth Care Forum, 40*(3), 177-192. doi: 10.1007/s10566-010-9129-z

- Ttofi, M. M., & Farrington, D. P. (2011). Effectiveness of school-based programs to reduce bullying: A systematic and meta-analytic review. *Journal of Experimental Criminology*, 7(1), 27-56. doi: 10.1007/s11292-010-9109-1
- Ttofi, M. M., Farrington, D. P., Lösel, F., & Loeber, R. (2011). Do the victims of school bullies tend to become depressed later in life? A systematic review and meta-analysis of longitudinal studies. *Journal of Aggression, Conflict and Peace Research*, 3(2), 63-73.
- Twenge, J. M., & Campbell, W. K. (2009). *The narcissism epidemic: Living in the age of entitlement*. New York: Free Press.
- Twenge, J. M., & Foster, J. D. (2008). Mapping the scale of the narcissism epidemic: Increases in narcissism 2002-2007 within ethnic groups. *Journal of Research in Personality*, 42, 1619-1622.
- Twenge, J. M., & Foster, J. D. (2010). Birth cohort increases in narcissistic personality traits among American college students, 1982-2009. *Social Psychological and Personality Science*, 1(1), 99-106. doi: 10.1177/1948550609355719
- Vaillancourt, T., Hymel, S., & McDougall, P. (2003). Bullying Is Power: Implications for School-Based Intervention Strategies. *Journal Of Applied School Psychology*, 19(2), 157-176. doi:10.1300/J008v19n02_10
- Vonk, J., Zeigler-Hill, V., Mayhew, P., & Mercer, S. (2013). Mirror, mirror on the wall, which form of narcissist knows self and others best of all?. *Personality And Individual Differences*, 54(3), 396-401. doi:10.1016/j.paid.2012.10.010

- Wai, M., & Tiliopoulos, N. (2012). The affective and cognitive empathic nature of the dark triad of personality. *Personality and Individual Differences, 52*(7), 794-799. doi: 10.1016/j.paid.2012.01.008
- Wallace, M. T., Barry, C. T., Zeigler-Hill, V., & Green, B. A. (2012). Locus of Control as a Contributing Factor in the Relation Between Self-Perception and Adolescent Aggression. *Aggressive Behavior, 38*(3), 213-221. doi: 10.1002/ab.21419
- Washburn, J. J., McMahon, S. D., King, C. A., Reinecke, M. A., & Silver, C. (2004). Narcissistic features in young adolescents: Relations to aggression and internalizing symptoms. *Journal of Youth and Adolescence, 33*(3), 247-260. doi: 10.1023/B:JOYO.0000025323.94929.d9
- Whiteside, S. P., & Lynam, D. R. (2001). The Five Factor Model and impulsivity: Using a structural model of personality to understand impulsivity. *Personality and Individual Differences, 30*(4), 669-689. doi: 10.1016/s0191-8869(00)00064-7
- Wolke, D., Woods, S., Bloomfield, L., & Karstadt, L. (2000). The association between direct and relational bullying and behaviour problems among primary school children. *Journal Of Child Psychology And Psychiatry, 41*(8), 989-1002. doi:10.1111/1469-7610.00687
- Wong, D. S. W., Cheng, C. H. K., Ngan, R. M. H., & Ma, S. K. (2011). Program Effectiveness of a Restorative Whole-School Approach for Tackling School Bullying in Hong Kong. *International Journal of Offender Therapy and Comparative Criminology, 55*(6), 846-862. doi: 10.1177/0306624x10374638

- Ybrandt, H., & Armelius, K. (2010). Peer Aggression and Mental Health Problems
Self-Esteem as a Mediator. *School Psychology International, 31*(2), 146-
163. doi: 10.1177/0143034309352267
- Yeo, L. S., Ang, R. P., Loh, S., Fu, K. J., & Karre, J. K. (2011). The role of affective
and cognitive empathy in physical, verbal, and indirect aggression of a
Singaporean sample of boys. *Journal of Psychology: Interdisciplinary and
Applied, 145*(4), 313-330. doi: 10.1080/00223980.2011.568986
- Young, S. (1998). The support group approach to bullying in schools. *Educational
Psychology in Practice, 14*(1), 32-39. doi: 10.1080/0266736980140106
- Zeigler-Hill, V. (2006). Discrepancies Between Implicit and Explicit Self-Esteem:
Implications for Narcissism and Self-Esteem Instability. *Journal of
Personality, 74*(1), 119-143. doi: 10.1111/j.1467-6494.2005.00371.x