

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 AND HUMAN SCIENCES

School of Psychology

**What it Takes to Attain Status in Face-to-Face Groups: The
Importance of Distinguishing between Dominance and Prestige
Hierarchies**

by

Wendy Georgina de Waal-Andrews

Thesis for the degree of Doctor of Philosophy

May 2012

UNIVERSITY OF SOUTHAMPTON
ABSTRACT
FACULTY OF SOCIAL AND HUMAN SCIENCES
SCHOOL OF PSYCHOLOGY
Doctor of Philosophy
WHAT IT TAKES TO ATTAIN STATUS IN FACE-TO-FACE GROUPS: THE
IMPORTANCE OF DISTINGUISHING BETWEEN DOMINANCE AND PRESTIGE
HIERARCHIES
By Wendy Georgina de Waal-Andrews

Hierarchy is a defining feature of groups (Berger et al., 1972; Fiske, 2010; Sidanius & Pratto, 1999). In this thesis I examined what it takes to climb up this hierarchy in face-to-face groups. I did so from three angles: what people need to *do* in order to attain status, what kind of person people need to *be* in order to attain status, and what people may need to *sacrifice* in order to attain status. Moreover, I assessed the moderating effect on these relations of two fundamental processes underlying group hierarchies: dominance (i.e., assertively claiming status) and prestige (i.e., willingly being granted status).

Before addressing the main questions of this thesis, I examined the impact of dominance and prestige processes on perceptions of group hierarchy types (Chapter 2). A vignette study found that assertively claiming status for oneself and willingly being granted status both emerged as viable ways of enhancing perceived status, above and beyond formal status. It also found that, at the group level, each type of process worked against the other: perceptions of each were undermined by mixing it with the other. This finding implies that groups can be classed along a hierarchy type continuum, ranging from highly dominance-based to highly prestige-based.

Having empirically established how dominance and prestige processes jointly shape the types of hierarchies that exist in groups, I addressed the main questions of this thesis in a series of experimental and naturalistic studies.

In Chapter 3, I examined the interpersonal behaviours that promote status in different types of group hierarchies. I found that agentic behaviour promoted status *both* in dominance-based and in prestige-based hierarchies. In contrast, communal behaviour *augmented* status in prestige-based hierarchies, but *diminished* status in dominance-based hierarchies. Thus, I found that status attainment is associated with diametrically different interpersonal behaviours in different hierarchy types.

In Chapter 4, I assessed how the self-appraisals of people who engage in different status-promoting behaviours differ. I found that self-esteem was associated with behaviour that was *high* in agency and *high* in communion, whereas narcissism was associated with behaviour that was *high* in agency and *low* in communion. Thus, *self-esteem* related to behaviours that promote status in *prestige*-based groups, whereas *narcissism* related to behaviours that promote status in *dominance*-based groups.

In Chapter 5, an experimental study found that the interpersonal warmth towards individuals increased with status in relatively prestige-based hierarchies and decreased with status in relatively dominance-based hierarchies. In other words, in prestige-based groups, being liked and being included were liable to go hand-in-hand, whereas in dominance-based groups, there was a trade-off between them: to attain status one might need to *sacrifice* inclusion. However, this finding needs to be interpreted with caution as I failed to replicate it in a subsequent naturalistic study.

Together, these findings presented in this thesis convincingly demonstrate that hierarchy type is a diversifying feature of groups. As such, they powerfully illustrate the importance of distinguishing between dominance-based and prestige-based groups.

LIST OF CONTENTS

Chapter 1	1
<i>Hierarchy, status, and status processes in face-to-face groups</i>	
Chapter 2	15
<i>Status processes and their effect on face-to-face groups: the nature of dominance and prestige hierarchies</i>	
Chapter 3	27
<i>Behavioural strategies for getting ahead in dominance and prestige hierarchies</i>	
Chapter 4	45
<i>Self-regard and behavioural strategies: Do self-esteem and narcissism relate to alternative ways of getting ahead?</i>	
Chapter 5	79
<i>Interpersonal warmth towards high-status individuals in dominance and prestige hierarchies</i>	
Chapter 6	101
<i>Final conclusions and implications: Why it's important to distinguish between dominance and prestige hierarchies</i>	
References	117
Footnotes	137

LIST OF TABLES AND FIGURES

Table 2.1	141
<i>Study 2.1: Perceptions of hierarchy type as a function of the experimental manipulation of whether the group hierarchy was dominance based or prestige-based</i>	
Table 3.1	142
<i>Study 3.1: Fixed effects estimates (top) and variance-covariance estimates (bottom) for models predicting group members' status</i>	
Figure 3.1	143
<i>Study 3.1: Target status as a function of Behaviour exhibited by the target, plotted for hierarchy types of college classes calculated one standard deviation below and above the mean</i>	
Figure 3.2	144
<i>Study 3.2: Mean differences in target status in Study 3.2 as a function of the hierarchy type of student group (either Dominance-based or Prestige-based) and of the type of behaviour exhibited by one of its members (either high or low in Agency, and high or low in Communion)</i>	
Table 4.1	145
<i>Study 4.1: Means, Standard Deviations and Cronbach Alpha values</i>	
Table 4.2	146
<i>Study 4.1: Correlation (Significance) Values</i>	
Table 4.3	147
<i>Study 4.2: Means, Standard Deviations, and Cronbach Alpha values</i>	

Table 4.4	148
<i>Study 4.2: Correlation (Significance) values</i>	
Table 4.5	149
<i>Study 4.3: Means, Standard Deviations and Cronbach Alpha values</i>	
Figure 5.1	150
<i>Study 5.1: Interpersonal warmth shown towards a group member as a function of the experimental manipulation of hierarchy type (dominance-based or prestige-based) and status (high or low).</i>	
Table 5.1	151
<i>Study 5.1: Fixed Effects Estimates (Top) and Variance-Covariance Estimates (Bottom) for Models Predicting Group Members' Interpersonal Warmth</i>	

LIST OF APPENDICES

Appendix 1.1	153
<i>Example of a dominance-based status conflict in the Yqnomamö tribe</i>	
Appendix 1.2	154
<i>Example of how attempts to control others are averted in the Semai tribe</i>	
Appendix 2.1	155
<i>Vignettes Used in Study 2.1</i>	
Appendix 3.1	163
<i>Pre-test A3.1 Perceptions of Agentic Behaviour</i>	
Appendix 3.2	166
<i>Pre-test A3.2 Perceptions of Communal Behaviour</i>	
Appendix 3.3	169
<i>Group Hierarchy Type Manipulation Materials for Study 3.1</i>	
Appendix 3.4	171
<i>Behaviour Type Manipulation Materials for Study 3.1</i>	
Appendix 4.1	173
<i>Pre-test A4.1 Meeting or Exceeding Standards</i>	
Appendix 4.2	180
<i>Vignettes and Response Options with Inter-Rater Alphas and Means obtained in Study P4.1</i>	
Appendix 4.3	183
<i>Manipulations of Self-Esteem and Narcissism Used in Study 4.3</i>	

Appendix 4.4	185
<i>State Measure of Self-Esteem Used in Study 4.3</i>	
Appendix 4.5	186
<i>State Measure of Narcissism Used in Study 4.3</i>	
Appendix 5.1	187
<i>Vignettes Used in Study 5.1 as Hierarchy Type Manipulation</i>	
Appendix 5.2	189
<i>Vignettes Used in Study 5.1 as Status Manipulation</i>	

DECLARATION OF AUTHORSHIP

I, **Wendy de Waal-Andrews** declare that the thesis entitled **What it Takes to Attain Status in Face-to-Face Groups: The Importance of Distinguishing between Dominance and Prestige Hierarchies** 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 or mainly 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:

ACKNOWLEDGEMENTS

I would have never completed this thesis without the encouragement, inspiration, help, and support provided by many people that I met along the way. Of all these people, first and foremost I would like to thank Aiden Gregg, my PhD supervisor. Aiden, working together has been a great pleasure in many ways. Thank you for sharing your elaborate knowledge of social psychology with me (as well as a range of obscure words and facts!). I would also like to thank Constantine Sedikides, my PhD advisor. Constantine, thank you for your encouragement, your kindness, and for offering sensible words of wisdom whenever I needed them. Thank you as well, Claire, Erica, Sylwia, Tim, Elena, Martin, Jochen, and Michelle, my roommates at the CRSI, for your friendship and for all the fun we had. I hope all of our paths will continue to cross over the years. One of the best things of being in this line of work is having colleagues like you!

For their assistance with data collection and entry I would like to thank Margaret Allan, Bethany Britton, Sam Janssen, Harriet Jones, Yasmin Morgan, Gillian Sloan, Shaun Smith, and Helen Toffa. Joeri Wissink I would like to thank for his assistance with translating materials. Your help has made a big difference in getting the work done.

Part of the time that I worked on this thesis I spent at Tilburg University, where I also collected some of the data. I would like to thank Marcel Zeelenberg, Christel Rutte, and Diederik Stapel for giving me the opportunity to visit Tilburg University, and Ilja van Beest for asking me to remain there as a teacher while I completed my PhD. I would also like to thank all my colleagues at Tilburg University for their sharing their ideas and helping me improve my own.

Balancing the work of this thesis with a busy family life has been a challenge, but also reminded me what matters most. Jeroen, Marisa, Otis, and Ferran, I dedicate this thesis to you. Thank you for taking each step on the way to this PhD with me. For you, more than anyone else, I'm glad to write its final words.

CHAPTER 1

Hierarchy, Status, and Status Processes in Face-to-Face Groups

One of the most important challenges that people face in navigating their social world is *attaining status* (Fiske, 2010). People with high status are more influential (Berger, Cohen & Zelditch, 1972), have larger and stronger social networks (Ibarra & Andrews, 1993), enjoy a wider choice in romantic partners (Betzig, 1986), and lead longer and healthier lives (Ellis, 1994). To have status is to succeed, to lack it is to fail.

In this thesis I examine what it takes to attain status. I do so in several ways. First, I assess what people need to *do* in order to attain status. To achieve this, I assess what types of interpersonal behaviours promote status and what types of behaviours diminish it. Second, I assess what kind of person people need to *be* in order to attain status, focusing in particular on how people who engage in status-promoting behaviours feel about themselves. Finally, I assess what people may need to *sacrifice* in order to attain status. In particular, I focus on a possible interpersonal ramification of status: whether a high rank in a status hierarchy comes at the expense of the interpersonal warmth one receives from others.

As human psychology is adapted for the intimate hunter-gatherer bands in which we spent much of evolutionary history (Baumeister & Leary, 1995; Van Vugt, Hogan, & Kaiser, 2008), this investigation is focused on status in *face-to-face groups*. Hierarchies in such groups can be based on two profoundly different processes: dominance and prestige (Henrich & Gil-White, 2001). I argue that what it takes to attain status in a group will depend strongly on the extent to which each of these processes underlies the group hierarchy.

Hierarchy and status in face-to-face groups

A *group hierarchy* is defined here as the *informal* ranking of group members along one or more social dimensions (e.g., Gruenfeld & Tiedens, 2010; Magee & Galinsky, 2008). Informal status differences emerge in interactions between group members. Formal status differences, on the other hand, may be established by forces within (e.g., explicitly agreed rules) or outside of a group (e.g., the formal hierarchy of the organization in which a group exists). Formal and informal hierarchies may often overlap but need not overlap: informal leaders of a group may be held in high standing, whereas formally appointed bosses may not be taken seriously. In this thesis I focus on informal rather than formal hierarchies because, when the two diverge, it is the informal hierarchy that truly reflects the relative ranking of group members in the eyes of others.

I focus on status in *face-to-face groups*, defined as groups where status is mediated by proximate rather than formalized interactions (Anderson, John, Keltner, & Kring, 2001). To qualify as face-to-face groups, groups must not be too large or too geographically dispersed, as this hinders face-to-face interactions among all members. Face-to-face groups are ubiquitous. Many task or project teams in the work environment engage in face-to-face interactions, as do sports teams, groups of friends and relatives. Moreover, across evolution, humans were generally organized in face-to-face groups, making this the natural habitat to which our psychology is adapted (Caporael, 1996).

The term *status* is used here to refer to a person's position in an informal group hierarchy. I use the term status rather than the term rank or position, because the latter are often associated with more formally established hierarchies. As group hierarchies need not reflect the formal order at the level of groups, organizations or

society, they are subjectively perceived rather than objectively verifiable from typical indicators of formal status like education level, position, or income. Conceptually, this differentiates status in such a hierarchy from a number of related concepts. For example, Social Economic Status (SES) is based on objectively verifiable indicators of a person's achievements and possessions. Moreover, a hierarchy of power differentiates individuals in terms of their control (or potential control) over valued resources (e.g., Fiske, 2010). This implies that power often goes beyond mere psychological influence and in such cases has an objective, rather than subjective base.

Although face-to-face status is essentially subjective, the presence of status differences in a group affects how people interact. Firstly, high status group members are more *prominent* than low status group members: they speak more, their opinion is sought more often, and their contributions receive more attention from others (Berger et al., 1972; Chance, 1967). Secondly, high status group members are more *influential* than low status group members: they are better able to get what they want from other group members, and their opinions carry more weight in group decisions (Berger et al., 1972; Hawley, 1999; Mazur, 1985). Prominence and influence are so strongly intertwined with status that many definitions list them as defining features of status (Anderson et al., 2001).

In this thesis, prominence and influence are both taken to be *necessary* components of status. In other words, neither alone suffices to constitute the informal ranking that exists in a group: prominence without influence does not constitute status, nor does influence without prominence. Moreover, jointly prominence and influence are taken to be *sufficient* indicators of status. Thus status can be defined

and measured in terms of prominence and influence: in order to know whether status is high, it is sufficient to determine whether prominence and influence are high.

The definition above bucks the recent trend in social psychology to define status solely in terms of prestige (e.g. Fiske, 2010; Magee & Galinsky, 2008). However, it echoes perspectives in anthropology (e.g., Henrich & Gil-White, 2001) and evolutionary psychology (e.g., Buttermore & Kirkpatrick, 2009; Cheng, Tracy, & Henrich, 2010) that define status in terms of both dominance and prestige, because prominence and influence may reflect a ranking based on prestige, on dominance, or on both. As such, the recurrent definition also incorporates the so-called “conflict” perspective that defines status in terms of the aggressive dominance of one party over another (e.g., Mazur, 1985; Mills, 1956). More importantly, it fittingly reflects the informal hierarchy that exists in the eyes of group members. This type of hierarchy need not always be based on prestige. As victims of high-school bullies, or subordinates of autocratic bosses realize, dominant or aggressive individuals enjoy a certain status in the eyes of others, enjoying both prominence and influence, but not necessarily prestige. As I shall demonstrate in Chapter 2, my definition also accords with lay perceptions of status as potentially resulting from dominance-processes, prestige-processes, or both.

Defining status in terms of prominence and influence allows me to further distinguish it from power. Distinguishing status from power conceptually is important. Although status and power are empirically distinct constructs and have distinct effects on for example social judgments (Fragale, Overbeck, & Neale, 2011), resource allocation strategies (Sachdev & Bourhis, 1991), and intergroup perception (Boldry & Gaertner, 2006), the two constructs are conceptually confounded. For example, both are important sources of influence (Boldry & Gaertner, 2006; Fragale

et al., 2011). Moreover, both are context-dependent, and may often reflect a person's competence in a given context (e.g., compare a recruiter of a prestigious company dealing with job applicants or being fined by a police officer for speeding on the way home; Berger et al, 1972; Fragale et al, 2011). However, where status necessarily involves *both* prominence and influence, power need not involve prominence, as in the case of a disregarded leader mentioned earlier. Status, on the other hand, need not imply control. In prestige-based hierarchies, crude attempts to assert control can decrease status (Henrich & Gil-White, 2001). In dominance-based hierarchies where status is maintained through threat, status may more often entail control. However, as status exists purely in the eyes of others, high-status group members need not actually control resources, but may be merely be perceived as controlling them (see Sachdev & Bourhis, 1991 for such an attribution process at the group level).

According to the current definition of status, both street gang leaders and eminent psychologists qualify as examples of people with high status. However, it seems likely that the nature of their relations and interactions with fellow group members differ considerably. One important variable that may capture such differences is the hierarchy type of the group.

Hierarchy Types

There are many ways to distinguish between hierarchies. But one fundamental distinction seems to stand out across different literatures. I will refer to this distinction here as that obtaining between hierarchies based in *dominance* (i.e., where status is aggressively grabbed by a few group members) and those based in *prestige* (i.e., where status is freely granted by many group members), a terminology that is commonly used by both anthropologists (e.g., Henrich & Gil-White, 2001; Von Rueden, Gurven & Kaplan, 2008, 2010) and evolutionary psychologists (e.g.,

Buttermore & Kirkpatrick, 2009; Cheng, Tracy, & Henrich, 2010a). It is important to note that it is not admiration for an individual's forcefulness that is the basis of status in a dominance-based hierarchy, but rather other members' fear that this force will be directed at them (cf. Henrich & Gil-White, 2001). This is highlighted by characterizations of dominance-striving as force (rather than persuasion: Kracke, 1975) or intimidation (rather than attraction: Gilbert, Price, & Allan, 1995).

Over the course of evolution human social hierarchies likely went through stages of being more dominance-based or more prestige-based (Van Vugt, Hogan, et al., 2008), leading to the persistence of both routes to status as evolutionary stable alternatives. In support of this view, hierarchies generally fitting either of these descriptions have been observed among small-scale pre-literate societies (e.g., Kracke, 1978). For example, Chagnon (1992/1968) describes how an ambitious member of the violent Amazonian Yanomamö tribe attempts to "grab" status in his group by engaging in a power-struggle with the headman (see Appendix 1.1). On the other hand, Dentan (1979) describes how the Semai of Malaysia decide freely whom they confer respect to, and how attempts to enforce one's will are met with avoidance rather than acquiescence (see Appendix 1.2 for a description of this process).

Among social psychologists and sociologists, a debate concerning the nature and purpose of human hierarchies reflects a similar distinction. The *conflict* view states that hierarchies result from conflict between people with differing interests and resources (Mills, 1956). According to this view status is something that is claimed: those who are able to realize their will against the resistance of others attain status (Kemper, 1994; Mazur, 1985). In contrast, the *functional* view states that hierarchies result from the need to effectively divide roles in order to achieve common goals (Davis & Moore, 1945). According to this view, status is granted by group members

to individuals who fulfil roles that they value (Berger et al., 1972). In this case, status differentiation is functional in that it facilitates the effective division of labour.

It is important to note that dominance and prestige are qualitatively different *processes* evoked by distinctly different stimuli (Henrich & Gil-White, 2001). Moreover, given that some of the prototypical verbal and non-verbal behaviours associated with dominance and prestige processes are exact opposites (e.g., dominance is associated with avoiding a high-status individual whereas prestige is associated with seeking proximity to a high-status individual: Cheng et al., 2010a; Henrich & Gil-White, 2001) these two processes are unlikely to coincide. Thus, there is reason to believe that dominance and prestige processes are negatively correlated. In contrast, at the level of the *individual*, dominance and prestige represent largely orthogonal dimensions (Buttermore & Kirkpatrick, 2009; Cheng et al, 2010a). In other words, individuals may be both admired by others (i.e., have prestige) and feared by others (i.e., have dominance) to varying degrees. In *groups*, finally, dominance and prestige processes often partly co-occur (cf. Anderson et al., 2001). For example, in groups that value assertive behaviour (e.g., a relatively aggressive sales team), people who aggressively claim status may also earn respect for such behaviour. On the other hand, people demonstrating their value to a strongly competence-oriented group (e.g., a group of academics) may need to aggressively defend their position against that of group members (i.e., academics with diverging views). Thus, rather than groups being either completely dominance-based or completely prestige-based, they may be based on both processes to varying degrees. As such, the hierarchy type¹ of some groups may be *primarily* dominance-based, whereas the hierarchy type of others may be *primarily* prestige-based. As this thesis

will argue, what it takes to attain status may differ importantly across such different groups.

Overview

Central to this thesis is the contention that status in face-to-face groups results from and is maintained by both dominance and prestige processes in varying degrees. Moreover, the relative importance of each of these processes will differ across groups, resulting in different hierarchy types. These hierarchy types are defining features of groups that affect the nature of the relations and interactions in groups, and the psychological processes that co-occur with them.

Conditions prompting the emergence of relatively dominance-based or relatively prestige-based hierarchies have been studied across a range of disciplines (Halevy, Chou, Cohen, & Livingston, 2012; Kracke, 1978; Schlessinger, 1986; Van Vugt, Hogan, et al., 2008). Moreover, anthropologists have described dominance and prestige *processes* in some detail (see e.g. Henrich & Gil-White, 2001), and psychologists have studied *individual differences* in engaging in these processes (e.g., Buttermore & Kirkpatrick, 2009; Cheng et al., 2010a). However, to my knowledge I am the first to study the *consequences for individual group members* of differences in dominance and prestige at the group level. My aim in doing so is to understand how such differences impact what it takes to attain status: what people need to *do* to attain status, what kind of *people* it takes to attain status, and what people may need to *sacrifice* to attain status. I argue that the hierarchy type of a group will moderate each of these aspects of status attainment.

Before addressing the main questions of this thesis, I assessed the impact of dominance and prestige processes on perceptions of group hierarchy types (see Chapter 2). In their seminal paper, Henrich and Gil-White (2001) argued that

dominance and prestige processes are alternative routes to status. Although there is both qualitative (e.g., Chagnon, 1992/1968; Dentan, 1979; Kracke, 1978) and quantitative (e.g., Cheng et al., 2010a, 2010b) research supporting this view, this research is sparse and raises interpretational issues. For example, people who are rated as either highly dominant or highly prestigious are also rated highly on leadership, suggesting that both represent a means of obtaining and exerting influence (Cheng et al., 2010a, 2010b). However, it remains unclear whether highly dominant individuals attain status because others admire or fear their assertive behaviour (cf. Henrich & Gil-White, 2001; see also Anderson & Kilduff, 2009b). Similarly, as prestigious individuals tend to dominate interactions (Shelley & Troyer, 2001), it remains unclear whether others grant them status or whether they claim it for themselves. My first aim was therefore to illustrate unambiguously that **dominance and prestige are both viable routes to status.**

My second aim was to assess **the joint effect of dominance and prestige processes on perceptions of individual status and of group hierarchy type.** As noted earlier, even in groups in which dominance processes prevail, prestige processes may also take place to some degree, and vice versa. How might the joint presence of these processes affect people's perception of a group hierarchy? As the verbal and non-verbal behaviours associated with dominance and prestige processes are sometimes exact opposites (see Cheng et al., 2010a; Henrich & Gil-White, 2001), there is reason to believe that their effects on perceptions of a group will be mutually antagonistic: the presence of dominance processes will make people perceive a group hierarchy as less prestige-based and vice-versa. In other words, it seems likely that people perceive hierarchy types as forming a continuum ranging from strongly dominance-based to strongly prestige-based. Moreover, different relative levels of

dominance-striving and prestige-striving will offer a viable route to high status, depending on a group's position on that continuum, but engaging in neither dominance-based nor prestige-based status-striving will not.

I found support for these predictions in an experimental vignette study. When a student was allegedly elected president of a student association without having engaged in either dominance or prestige processes this student was seen as having lower status than when they had allegedly engaged in dominance processes, in prestige processes, or in both. Moreover, their perceived level of status did not differ in the latter three conditions. The two processes also had a mutually antagonistic effect on perceptions of the group hierarchy: when either process was combined with the other, its impact on the perceived hierarchy type of the group dwindled. In other words, the student association was seen as less dominance-based when dominance processes allegedly co-occurred with prestige processes, and vice versa.

Having empirically established how dominance and prestige processes jointly shape the types of hierarchies that exist in groups, I turned to main topic of this thesis: *what it takes to attain status*. In Chapter 3, I focused on **the interpersonal behaviours that promote status in different types of group hierarchies**.

Conceiving of these behaviours along the main axes of a circumplex model (e.g., Wiggins, 1979) allowed me to obtain a complete picture of those behaviours that have meaningful interpersonal consequences (Wiggins, 1979). This chapter provides a crucial synthesis of two important, competing, theoretical views of status (the conflict view and the functional view) as well as a single framework for interpreting findings traditionally associated with one or the other view. Moreover, it paints a more complete picture of the hierarchy type construct that lies at the heart of this thesis.

As agentic (i.e., assured, dominant) behaviour signals both forcefulness and competence (Anderson & Kilduff, 2009b), it may instil both fear and admiration in others. Therefore, I predicted that agentic behaviour would promote status *both* in dominance-based and in prestige-based hierarchies. In contrast, communal behaviour may signify consideration for others as well as potential for exploitation (by signalling a lack of readiness for engaging in competition), and so should *augment* status in prestige-based hierarchies, but *diminish* status in dominance-based hierarchies.

After pre-tests confirmed people's diverging perception of the abilities and skills signalled by agentic behaviours (i.e., being both more persuasive and more intimidating) and communal behaviours (i.e., being both more respectful and more accommodating), I tested the effect of these behaviours on status attainment in two further studies. In the first study, college students provided peer ratings of their classmates' status, as well as of the agency and communion of the behaviours each of these classmates typically performed. I concurrently assessed the hierarchy type of each class. This sociometric design maximized ecological validity, by capitalizing on observations made in a genuine, face-to-face group. In the second study, I orthogonally manipulated hierarchy type (dominance-based; prestige-based) and the behaviour of the target (high or low in agency; high or low in communion) in hypothetical groups. Participants then estimated target status. The experimental design here maximized internal validity, enabling key constructs to be studied in the absence of confounds. Both studies found support for the hypotheses. Moreover, with their combination of field-study relevance and laboratory rigor, they did so after subjecting the hypotheses to broad and thorough testing.

Having established which behaviours promote status in groups with different hierarchy types, I now wanted to predict *which people* were likely to engage in such behaviours. One important individual difference that has been linked to people's level of status is their own appraisal of themselves (Cheng et al., 2010a; Kirkpatrick & Ellis, 2001; Leary & Baumeister, 2000). However, research has not yet established whether different self-appraisals are related to different status-promoting behaviours. Therefore, I assessed **how the self-appraisals of people who engage in different status-promoting behaviours differ** (see Chapter 4). Performing a bottom-up analysis of the scales most commonly used to measure self-esteem (i.e., the *Rosenberg Self-esteem Scale*: Rosenberg, 1965) and narcissism (i.e., the *Narcissistic Personality Inventory*: Raskin & Terry, 1988) I derived characteristic features of these two constructs (see Kwan & Mandisodza, 2007, for a similar approach) that emphasize their distinctions. Empirical data confirmed that self-esteem can be characterized primarily as a judgment of the self as *meeting* standards of worthiness, a judgment that, extrapolated externally, recalls a judgment of one's own capacity for prestige-based status. Narcissism, in contrast, can be characterized primarily as a judgment of the self as *exceeding* a standard, a judgment that, extrapolated externally, recalls a judgment of one's own capacity for dominance-based status. Given that people may be more likely to strive for status when they feel confident that they can attain it (Gilbert et al., 1995), I thus predicted that narcissism would be positively related to the behaviours that promote status in dominance-based hierarchies (i.e., behaviours high in agency and low in communion), whereas self-esteem would be positively related to the behaviours that promote status in prestige-based hierarchies (i.e., behaviours high in both agency and communion). I tested these hypotheses in a series of three studies. Using different measures of the main

constructs across studies, and measuring them at the trait as well as the state level, provided a clear and consistent pattern that supported the hypotheses.

Having established what behaviours promote status in different hierarchy types, and which people are likely to engage in such behaviours and thus attain status, the question arises as to what costs people incur when they engage in such behaviours. Such costs may be seen as *sacrifices* that need to be made in order to attain status and thus provide important further insight into *what it takes to attain status*, the main theme of this thesis. To answer this question, Chapter 5 assessed **the interpersonal consequences of status in different types of hierarchies**. Prior research already suggests that people with high status are perceived to be more competent than those with low status (Berger et al., 1985; Anderson & Kilduff, 2009b). However, it also paints a highly inconsistent picture of the interpersonal warmth group members feel towards people with high status (cf. Lee & Tiedens, 2001). Thus the effect of status on interpersonal perceptions of warmth, the other important dimension of social cognition (Fiske, Cuddy, & Glick, 2007), remains poorly understood. It stands to reason that such mixed findings may result from status being attained in contrasting ways. Thus, I predicted that status in relatively prestige-based hierarchies, being rooted in popularity, would elicit greater interpersonal warmth, whereas status in more dominance-based hierarchies, being rooted in coercion, would elicit less interpersonal warmth.

As in the earlier pair of studies, I tested this hypothesis in two studies that used different methods with complementary strengths. In the first study I manipulated the hierarchy type of hypothetical groups. In line with the hypothesis, the interpersonal warmth shown towards a hypothetical person of high status was greater when the hypothetical group the person belonged to was described as having

a prestige-based hierarchy than when it was described as having a dominance-based hierarchy. In the second study I measured the hierarchy type of classes of college students in the UK. All classes were rated by students as having a relatively prestige-based hierarchy. In line with this, the interpersonal warmth shown to students by their peers correlated positively with their level of peer-rated status in their class. However, when controlling for the nesting of students in college classes, the relation between status and interpersonal warmth did not differ across classes with different hierarchy types. In other words, the predicted interaction between status and hierarchy type did not emerge as significant in this study. Given that the hypothesis was supported in the first study, the failure to replicate this finding in the second study may have resulted from the natural limitations of the included sample. Future work assessing larger and more diverse samples might be able to replicate the interaction between status and hierarchy type in a natural setting and thus provide ecologically valid support for the hypothesis.

The following chapters provide a more detailed description of each of these studies and their findings. Together these chapters investigate different perspectives on what it takes to attain status: what people need to *do* to attain status, what kind of *people* it takes to attain status, and what people may need to *sacrifice* to attain status. As a whole, they reveal that status attainment is fundamentally moderated by the hierarchy type of a group. As such, they convincingly argue that in order to understand what it takes to attain status in groups, it is vital to distinguish between dominance and prestige hierarchies.

CHAPTER 2

Status Processes and their Effect on Face-to-Face Groups: The Nature of Dominance and Prestige hierarchies

Before investigating *what it takes* to attain status in groups – the focal concern of this thesis – I first need to establish whether hierarchies differ across groups, and if so, how they differ. To do so, I take a closer look at two important processes. *Dominance* processes involve group members submitting to an individual who aggressively claims high status, whereas *prestige* processes involve group members granting status to people who demonstrates traits, skills, or behaviour that they value (Henrich & Gil-White, 2001). Each of these two processes offered a viable route to status in face-to-face groups at some point in our evolutionary history (Van Vugt, Hogan, et al., 2008). In this chapter I first illustrate unambiguously that they both continue to do so. Having established that, I go on to investigate the more interesting implications of these processes for group hierarchies. In particular, I assess how the *joint presence* of these two processes affects how people perceive the hierarchy type of a group.

Dominance and Prestige Processes

In evolutionary terms, the ability of social animals to form a rank order is very old. Rudimentary status hierarchies are still ubiquitous in many lower animals, who commonly engage in a series of actions called “ritual agonistic behaviour” (Gilbert et al., 1995). Here, the less powerful party in a dispute ritually surrenders to another party to avoid injury or death, after which the more powerful party stops fighting, and claims victory by ritually displaying its dominance. Why does such a process exist? The reason is that, although the more powerful party can, by augmenting its status, increase its access to resources and improve its mating

prospects (Buss, 1999; Gilbert et al., 1995), it still runs at least some risk of injury or death, increasing the longer the dispute for status lasts (Gilbert et al., 1995). Ritual agonistic behaviour, which permits dangerous and protracted disputes to be substituted by safer and shorter ones, reduces the risk of physical harm to both weaker and stronger parties. The reciprocal signalling system thus increases the reproductive potential of both parties.

In humans, dominance striving need not entail the use of physically aggressive displays. Rather, it may take the form of criticizing or condescending behaviour, which is a social act that either inflicts, or threatens to inflict, psychological injury (Fournier, Moskowitz, & Zuroff, 2002). Regardless the type of display, if “intimidation” (Gilbert et al., 1995) is responded to with obedient submission, then the result is the propagation of status differences via a dominance process.

Prestige, more recently rooted in our evolutionary history, is another potential source of status (Henrich & Gil-White, 2001). Hierarchies based on prestige emerge when gifted group members convince other members to join their “clientele” of followers (Henrich & Gil-White, 2001), while less gifted ones critically evaluate the potential of alternative leaders to provide what they want (Price, 2000). Thus, status can here be achieved, not by imposing oneself on others, but by advertising attributes that others value. The presence of such a dynamic enables groups to benefit from the specialist skills (Henrich & Gil-White, 2001) or competent leadership (Van Vugt, 2006) of talented members. At all events, if the offer of valued attributes by the few is willingly accepted by the many, then the result is the propagation of status differences via a prestige process.

Given the strong evolutionary basis of both processes, my first hypothesis is that *dominance and prestige are both viable routes to status in face-to-face groups* (Hypothesis 2.1). Although some existing research already suggests that both dominance and prestige processes can promote status, findings are sparse and often raise interpretational issues. For example, violating social norms (Van Kleef, Homan, Finkenauer, Gündemir, & Stamkou, 2011), asserting force (Cheng et al., 2010a, 2010b; Kracke, 1978), or behaving angrily (Tiedens, 2001) can increase status, arguably as a type of dominance process. However, it is possible that such status increases result from other members' admiration for such forthright behaviours (i.e., a prestige process), rather than from their fear of the person displaying them (i.e., a dominance process; cf. Henrich & Gil-White, 2001; see also Anderson & Kilduff, 2009b). Conversely, being perceived as more competent (e.g., more highly educated: Moore, 1968; more knowledgeable: Shelly & Troyer, 2001; see also Berger et al., 1972), as more persuasive (Cheng et al., 2010a, 2010b; Kracke, 1978), or as more generous and willing to help others (Flynn, Reagans, Amanatullah, & Ames, 2006, Study 3) can promote status and influence, arguably as a type of prestige process. However, as such people also tend to dominate in interactions (Shelly & Troyer, 2001) it remains unclear to what extent participants in these studies are granted status or claim it for themselves.

From Status Processes to Group Hierarchy Types

Although the two status-attainment processes are distinct, a trade-off between them is liable to exist. (Compare the trade-off between high-elaboration processes and low-elaboration processes in the ELM model of persuasion, which consist of distinct but mutually competing processes; Petty & Wegener, 1998)¹. Hence, I advance the hypothesis that dominance-based and prestige-based processes operate

antagonistically in face-to-face groups. Accordingly, my second hypothesis is that, *to the extent that a group's hierarchy is characterized as dominance-based, it will be perceived as less prestige-based, and to the extent that a group's hierarchy is characterized as prestige-based, it will be perceived as less dominance-based.*

(Hypothesis 2.2)

To my knowledge, no research has yet directly investigated this hypothesis. However, ethological descriptions of prototypical groups (e.g., Henrich & Gil-White, 2001) offer indications that it might be true. Striking in such descriptions is that some of the interpersonal behaviours observed in relatively dominance-based hierarchies are the exact opposites of those observed in prestige-based hierarchies, suggesting they might be mutually antagonistic. For example, in dominance-based hierarchies, low-ranking individuals *seek to avoid* those with high rank, whereas in prestige hierarchies low-ranking individuals *seek proximity* to those with high rank. Moreover, in dominance-based hierarchies, high-ranking individuals *emphasize* their importance through aggressive displays (i.e., “grandstanding”) and expressions of superiority, whereas in prestige hierarchies high-ranking individuals *underplay* their importance through self-deprecation and expressions of gratitude (Henrich & Gil-White, 2001).

Study 2.1: Perceptions of Status

Given the ambiguity created in earlier studies by dominance and prestige processes being confounded, my first aim was to replicate the earlier findings using a sounder methodology. To clearly lay out the process underlying status attainment, the study used detailed and specific vignette descriptions of dominance and prestige processes taking place in a hypothetical group. Moreover, a manipulation check, that

was included at the end of the study, explicitly assessed the type of process leading to status in the described group. Thus, not only did I describe the two processes unambiguously, I also made sure they were interpreted as such.

To test both the independent and joint effects of both processes, I had participants read vignettes describing someone being elected president of a student association either as a result of a dominance process, a prestige process, both, or neither. Importantly, formal status (i.e., being elected) was equated across conditions. Thus, how status was achieved, via face-to-face interpersonal processes implying a type of group hierarchy was the key variable. Moreover, the design of the study permitted me to examine, by a comparative analysis of conditions, whether dominance and prestige processes had independent or antagonistic effects on the hierarchy types of the groups.

It is important to note that, rather than engaging directly with the student they were rating, participants rated their *perception* of the status of a student whose interactions with others were merely described to them in a vignette. Therefore, participants needed to imagine what it would be like to be a member of the group, in order to rate the student's status. To facilitate this process the context in which the vignette was situated (a student association) was chosen to be highly familiar to participants in the study (University students), so that the situation would seem real and meaningful for them and they could relate to it well.

Participants and Procedure

Undergraduate students ($N = 171$) from Tilburg University participated in a 2 (level of dominance-based processes: low, high) x 2 (level of prestige-based processes: low, high) x 2 (male, female) between-subject vignette study. The

participants ranged in age from 18 to 60 ($M = 21.18$, $SD = 4.82$) and were mostly female (70.8%).

Participants read one of eight vignettes² (adapted from Snyder, Kirkpatrick, & Barrett, 2008; see Appendix A) describing the election of a new president in a student association, either Tom (male condition) or Lisa (female condition, to additionally counterbalance by gender). The outcome (i.e., being successfully elected) was kept constant across conditions, but the underlying process was varied. In the high-dominance condition, the student was described as behaving in a domineering way, and the group as reacting with avoidant obedience. For example, the student “expressed a subtle threat to any competitors” and group members “would avoid eye contact and slouch in their seats”. In the high-prestige condition, by contrast, the student was described as being self-assured without being overbearing, and the group as reacting with keen interest. For example, the student spoke “in a relaxed and confident manner” and the group “made good eye contact and listened intently until (s)he was finished speaking”. Furthermore, in the high-dominance and high-prestige condition, the student sometimes spoke “forcefully”, but at other times spoke “in a relaxed and confident manner”, while the group would sometimes “avoid eye contact and slouch in their seats” but at other times would make “good eye contact and listen intently until (s)he was finished speaking”. Finally, in the low-dominance low-prestige condition, the student “spoke without much emotion or confidence” and the group reacted in a mixed fashion, such that “some of his/her peers remained attentive and others appeared uninterested”.

After reading the vignette, participants completed the measures below.

Measures

Participants rated the student's perceived status on two items (*How prominent [visible, attracts attention] is Tom/Lisa in his/her student association?; How influential is Tom/Lisa in his/her student association?*). Participants answered the questions ($M = 5.33$, $SD = 1.49$, $r(169) = .63$) on a 7-point scale (1 = *Not at All*, 7 = *Very Much*).

The perceived hierarchy type of the student association was measured with four items. Of these, two, $M = 4.53$, $SD = 1.51$, $r(169) = .57$, assessed how much status in the student association was based on dominance (*In Tom/Lisa's student association, status is assertively taken by people who have the ability or means to do so; In Tom/Lisa's student association, people with lower status go along with those with high status because they fear repercussions*). Another two, $M = 4.30$, $SD = 1.41$, $r(169) = .55$, assessed how much status in the student association was based on prestige (*In Tom/Lisa's student association, status is willingly given to people by others who value them ; In Tom/Lisa's student association, people with lower status go along with those with high status out of genuine respect*). Again, participants rated each item on a 7-point scale (1 = *Not at All*, 7 = *Very Much*).

Results

No main or interactive effects of gender emerged (all $ps \geq .27$). Hence, I omitted gender from all further analyses.

Perceptions of status. To assess whether the perceived status of the student depended on the process whereby they were elected president, I ran a 2 (level of dominance processes: low, high) x 2 (level of prestige processes: low, high) ANOVA on the students' perceived status. This analysis revealed main effect, such that both dominance processes, $F(1, 167) = 116.50$, $p < .001$, $\eta = .41$, and prestige processes,

$F(1, 167) = 119.91, p < .001, \eta = .42$, increased perceived status. Moreover, both processes interacted to determine status perceptions, $F(1, 167) = 78.98, p < .001, \eta = .32$. Simple effects analysis revealed, first, that dominance processes increased perceived status when the level of prestige processes was low, $F(1, 167) = 201.91, p < .001$, but not when it was high, $F(1, 167) = 1.75, p = .19$, and second, that prestige processes increased perceived status when the level of dominance processes was low, $F(1, 167) = 197.82, p < .001$, but not when it was high, $F(1, 167) = 2.12, p = .15$. Otherwise put, the student was perceived to possess equally high status when elected president as a result of dominance processes ($M = 5.95, SD = .71$), prestige processes ($M = 5.98, SD = .84$), or both ($M = 6.23, SD = .75$); however, when elected president as a result of neither dominance nor prestige processes, the perceived status of the student was significantly lower ($M = 3.31, SD = 1.13$).

These results suggest three things: (a) that perceived status varies independently of formal status; (b) that dominance and prestige processes are alternative ways of enhancing perceived status; and (c) that dominance and prestige processes do *not* necessarily combine to enhance status further. Result (a) thus underlines the importance of face-to-face interactions, rooted in the group hierarchy, for the achievement of status. Moreover, result (b) underlines the *viability* of either dominance or prestige processes for enhancing perceived status, and thus supports my first hypothesis. Furthermore, result (c) also reveals how these processes do not necessarily supplement each other, which is broadly consistent with, but not yet strongly supportive of, my second hypothesis.

Effect of processes on hierarchy type. Omitting the low-dominance low-prestige condition from further consideration (because perceived status was arguably not achieved therein), I proceeded to test the effect of dominance and prestige

processes on the perception of hierarchy type within the student association.

Accordingly, I ran one-way ANOVAs with three-levels, with perceptions of each hierarchy type in turn serving as the DV (Table 2.1). Significant results emerged: perceptions that the status hierarchy of the student association was dominance-based varied by condition, $F(2, 123) = 24.04, p < .001, \eta = .28$, as did perceptions that it was prestige-based, $F(2, 123) = 83.15, p < .001, \eta = .58$.

To further characterize the dominance-based differences, I conducted a Games-Howell post-hoc analysis, given the significant heteroscedacity across conditions (Levene's test: $p = .007$). This analysis revealed that the student association was perceived as most dominance-based when dominance processes were high and prestige processes low; intermediately dominance-based when both types of processes were high; and least dominance-based when dominance processes were low and prestige processes high (all pairwise $ps \leq .018$). The reverse pattern emerged for prestige-based differences (using Fisher's *LSD* test; Levene's test: $p = .109$). Here, the student association was perceived as most prestige-based when prestige processes were high and dominance processes low; intermediately prestige-based when both processes were high; and least prestige-based when prestige processes were low and dominance processes high (all pairwise $ps \leq .024$).

Thus, in addition to providing a simple manipulation check—to the effect that dominance and prestige processes were appropriately manipulated—these findings also imply that those processes tend to antagonize one another: when either process was mixed with the other, its impact dwindled. This is consistent with my second hypothesis.

Discussion

Study 2.1 revealed that, when the student was elected president without having engaged in either dominance or prestige processes, their status was perceived to be lower than if their election followed their engaging in either or both of these processes. This result confirms that face-to-face status is perceived to be inherently different than formal status (cf. Anderson et al, 2001). Moreover, assertively claiming status for oneself (i.e., via dominance processes) and willingly being granted status (i.e., via prestige processes) both emerged as viable ways of enhancing perceived status, above and beyond formal status.

I used a vignette-based experimental design in Study 2.1, in order to compare across carefully described conditions in a controlled setting. This allowed me to avoid the ambiguity created in earlier studies by dominance and prestige processes being confounded, but also resulted in my measuring perceived status rather than actual status. However, given that face-to-face status reflects group-members view of a person's status (Anderson et al., 2001), and the vignettes were designed such that participants could readily take this view, perceived status and actual status should converge in this study. Consequently, the results I obtained for perceived status should be equally true for actual status.

I did not find any relevant gender differences. This is different from some earlier studies that found gender differences in status attainment (Eagly & Karau, 1991), even despite congruent behaviour patterns (Eagly & Karau, 2002; Rudman, 1998), but in line with other studies suggesting that female status hierarchies are not inherently different in nature than those of males (Anderson et al., 2001).

I also found that, while both dominance processes and prestige processes can enhance perceived status, there is no advantage in engaging in both. Rather, engaging

in dominance processes, in prestige processes, or in both may lead to equally high perceptions of one's status in a given group. Moreover, at the group level I found that each type of status works against the other: perceptions of each are undermined by mixing it with the other. This finding implies that groups can be classed along a hierarchy type continuum, ranging from highly dominance-based to highly prestige-based. Moreover, a group's position along this continuum may determine the mix of dominance processes and prestige processes that will promote status in that group. Although the still limited support for this claim requires me to interpret it with caution (additional support will be provided by Study 3.2 in the next chapter), it promises to be helpful for interpreting otherwise seemingly contradicting findings.

For example, it makes clear why attaining status sometimes requires people to engage in dominance processes, other times to in prestige processes, and other times in both. For instance, threats to groups favour leaders with controlling and coercive leadership styles (Kracke, 1978; Padilla, Hogan, & Kaiser, 2007; Schlesinger, 1986), possibly because they are equipped to take decisive action, whereas seeking prestige in such circumstances with for example self-deprecating behaviour or expressing gratitude (Henrich & Gil-White, 2001) may make people seem indecisive and therefore have a detrimental effect on their status. Relatively stable conditions, on the other hand, when people seek to satisfy group outcomes as well as being treated fairly in the process (Van Vugt, Jepson, Hart, & de Cremer, 2004), favour leaders with more democratic styles (Schlessinger, 1986). As assertively claiming status suggests having selfish motives rather than having the best interest of group members at heart, it then may undermine rather than promote status. Given that group hierarchies range from being highly dominance-based to highly prestige-based, groups that feel highly threatened and groups that perceive no

threat, will fall at the two ends of this continuum. In the middle of continuum, then, we will find groups in which both types of processes are required to attain status. Examples of such groups include those in which people with valuable traits or skills go unnoticed if they fail to make some sort of claim to status. For example, an academic with valuable ideas may need to defend them against competing ideas in order to stake out their turf and earn credit for their work. Or stated conversely, a certain level of valuable traits or skills may be required to successfully engage in dominance-striving, because it makes such behaviour appear more legitimate (Burke, 2003). Such between-group differences in hierarchy type will be discussed in more detail in Chapter 3, where I also assess the behaviours that help people attain status in the different types of hierarchies in detail.

CHAPTER 3

Behavioural Strategies for Getting Ahead in Dominance and Prestige Hierarchies

Having demonstrated clearly in Chapter 2 that status hierarchies range from being highly dominance-based to highly prestige-based, I now move on to the main research goal of this thesis: to understand *what it takes to attain status*. In this chapter I investigate what *behaviours* promote status in face-to-face groups.

Despite the importance of status as a social variable, psychological research has not yet unequivocally established what behaviours promote it within groups. Some studies find that agentic (i.e., assured, dominant) behaviour promotes status (Anderson & Kilduff, 2009b; Driskell, Olmstead, & Salas, 1993). Yet others find that agentic behaviour undermines status (Ridgeway, 1987) and that group members resist domination (Boehm, 1999; Van Vugt et al., 2004). Furthermore, some studies find that communal (i.e., warm, agreeable) behaviour increases status (e.g., helping others: Flynn et al., 2006; behaving altruistically: Hardy & Van Vugt, 2006). Yet others find that friendly behaviour does not affect status (Anderson et al., 2001), or even decreases status by conveying submission (Preuschoft & van Hooff, 1997).

Thus, the findings to date are very mixed. Nonetheless, across the literature, two contrasting views regarding how status is attained can be distilled. First, the *conflict view* states that hierarchies arise based on conflicts between individuals with competing interests and varying resources (Mills, 1956). Accordingly, status results from the ability of some individuals to forcibly impose their will on others (Mazur, 1985). Second, the *functional view* states that hierarchies arise based on the differential value of individuals' roles in the pursuit of common goals (Davis &

Moore, 1945). Accordingly, status results from the collective judgment by group members that an individual contributes more to the group (Berger et al., 1972).

Here I attempt to synthesize these two views. I propose that the type of behaviour leading to status depends crucially on the type of hierarchy present in a group. Group hierarchies can range from being more *dominance-based*—where status is aggressively grabbed by few group members—to being more *prestige-based*—where status is freely granted by many group-members (see Chapter 2).¹ Thus, in line with the conflict view, group hierarchies may reflect the outcome of power-struggles between members; but also, in line with the functional view, group hierarchies may reflect the collective recognition of social value. For example, sales teams led by imperious bosses, or of street gangs riven by violence, are more dominance-based. Here, a more aggressive individual may well rise to the top. But work teams who elect their own leader, and academic pay grades based on peer-reviewed publications are more prestige-based. Here leaders emerge because the group recognizes their contribution to the collective.

As outlined in Chapter 1, the distinction between these two types of hierarchies is derived from theorizing in human ethology and evolutionary psychology, which holds that the survival challenges faced by a group shape the type of hierarchy that emerges (Kracke, 1978; Van Vugt, Hogan, et al., 2008). For example, early hunter-gatherers generally lived in prestige-based hierarchies. However, with the invention of agriculture, more dominance-based hierarchies emerged, arguably because accumulating resources and growing communities aggravated intergroup conflicts, and the need for leaders to aggressively deal with such threats (Van Vugt, Hogan, et al., 2008). Industrialization partially reinstated the prevalence of prestige-based hierarchies, perhaps because people had more freedom

to switch groups when treated unkindly (Van Vugt et al., 2004; Van Vugt, Hogan, et al., 2008). Still, dominance-based hierarchies still thrive in times of crisis and intergroup conflict (Kracke, 1978; Schlessinger, 1986).

Behavioural Strategies in Dominance and Prestige Hierarchies

To characterize interpersonal behaviour in groups, I employed the interpersonal circumplex model (e.g., Wiggins, 1979), which arranges behaviours circularly around two orthogonal axes. Behaviours along the vertical *agentic* axis run from compliant-submissive at the bottom to assured-dominant at the top. Behaviours along the horizontal *communal* axis run from cold-quarrelsome on the left to warm-agreeable on the right. I chose this model because any behaviour with meaningful interpersonal consequences can be conveniently located in the two dimensional space defined by these two main axes (Wiggins, 1979).

Applying the circumplex model to my framework, I first hypothesize that *agentic behaviour will promote status unconditionally*. First, agentic behaviour is liable to signal forcefulness, and so deter members of dominance-based groups from confronting a competitor. Second, agentic behaviour conveys the impression that an individual is competent (Anderson & Kilduff, 2009b), and so helps to persuade members they are worthy of support in prestige-based groups. A pre-test (see Box 1) confirmed that targets described in terms of high agency behaviour are seen as both more *persuasive* and more *intimidating* than targets described in terms of low agency behaviour. Hence, agentic behaviour should promote status *both* in dominance-based and in prestige-based hierarchies (Hypothesis 3.1).

Second, I hypothesize that *the effect of communal behaviour on status will be conditional upon a group's hierarchy type*. On the one hand, communal behaviour is liable to rally general support, and thus advance social rank in prestige-based groups.

Just as voters in a democracy tend to support someone who has their best interests at heart, lower-ranked members of prestige-based groups should grant status to members who treat them respectfully. On the other hand, exhibiting communal behaviour may signify a lack of readiness to engage in competition. In the dog-eat-dog environment of dominance-based groups this is liable to signify weakness and to invite exploitation. A second pre-test (see Box 2) confirmed that targets described in terms of high communal behaviour are seen as both more *respectful* and more *accommodating* than targets described in terms of low communal behaviour. Hence, hierarchy type should moderate the effect of communal behaviour, such that communal behaviour will *augment* status in prestige-based hierarchies, but will *diminish* status in dominance-based hierarchies (Hypothesis 3.2).

Study 3.1

In Study 3.1 I assessed whether natural graduations in hierarchy type across groups moderate the behaviour-status link in real-life settings. As status is very important among adolescents (Coleman, 1961), I tested the hypotheses in classes of UK college students of around 17 years of age. I relied on peer ratings of interpersonal behaviour and status as students that age keep a close eye on each other's behaviour and can make detailed estimations of each other's status (Coleman, 1961). More generally, face-to-face status reflects the perspective of group members and is thus best rated by them (Anderson et al., 2001). I employed an information-maximizing round-robin design within each class, such that, in assessing both interpersonal behaviour and status, each rater evaluated different targets, and each target was evaluated by different raters. This ensured reliable and objective measures of each target.

Participants and Procedure

College students ($N = 182$: 10 classes of 8-25 students) participated during two sessions with repeated measures. I removed participants who rated fewer than 80% of their peers, were rated by fewer than 80% of their peers, or who both rated fewer than 90% of their peers and were rated by fewer than 90% of their peers.² I also removed five participants after an outlier analysis revealed their scores were minimally reliable over time. However, I retained all other students present at only one session, as t -tests confirmed that those present only at Session 1 ($n = 27$) or only at Session 2 ($n = 13$) did not differ from those of students present at both sessions (all $ps < .05$). This left 170 participants.

Demographic data were obtained in Session 1 in which 157 students (118 females, 39 males; $M_{age} = 16.96$, $SD = 1.23$) participated. Participants subsequently rated the interpersonal behaviour and the status of each student in their class, and their class' hierarchy type. All key measures were repeated two weeks later in Session 2.

Measures

As varying the scales administered reduces common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), participants rated status on a 7-point scale, hierarchy type on a 6-point scale, and interpersonal behaviour on an 11-point grid-type measure.

To measure status, participants rated each student in their class from *not at all* (1) to *very much* (7) on a single item: “Thinking about each person in your class in turn, indicate how prominent (*i.e.* visible, attracts attention) and influential you feel they are in your class”. As I pointed out in Chapter 2, this item was chosen because status differences manifest themselves primarily in *prominence* (high status people

speak more and receive more attention; Berger et al., 1972; Chance, 1967) and *influence* (the opinions of high status people carry more weight and they get what they want more frequently; Berger et al, 1972; Mazur, 1985).

The class hierarchy type was measured with two items running from a prestige pole (1) to a dominance pole (6). The first item ran from “*status is willingly given to people by others who value them*” to “; the second from “*people with lower status go along with those with high status out of genuine respect*” to “*people with lower status go along with those with high status because they fear repercussions*”.

Interpersonal behaviour was measured with the *Interpersonal Grid (IG;* Moskowitz & Zuroff, 2005). This circumplex-like measure features a square grid with two main axes. The vertical, agentic axis runs from compliant-submissive at the bottom to assured-dominant behaviour at the top. The horizontal, communal axis runs from cold-quarrelsome on the left to warm-agreeable on the right. The ends of these axes, as well as the corners of the grid, contain anchor labels. Participants placed a single “X” in the grid to simultaneously rate agentic and communal behaviour for each student in their class. I chose this item because it has been shown to be particularly well suited for research in which many ratings must be made briskly (Moskowitz & Zuroff, 2005). To expedite the familiarization process, participants were given a full explanation of the grid, illustrated by examples.

Results

My analysis of the data was designed to take into account both the sociometric nature of the round-robin data as well as the hierarchical nesting of the participants in classes. To do so, I first calculated composite peer ratings from the sociometric data using Kenny and La Voie’s (1984) social relations model and the associated *SOREMO* software (Kenny, 1994). To take into account the nesting of

data within classes, I tested the hypotheses with the mixed models option in SPSS and included class as a random effect in the model. Given the complexity of these analyses, I maximized the data available to perform them by merging participant scores across the two data collection sessions, including all participants who had taken part in at least one of the two.

Assessing temporal stability. Before merging the data across the two data collection sessions, I assessed their stability across these two sessions. For the hierarchy type measure, I first created hierarchy type composites by averaging participant scores on the two items for the first, $r_1(168) = .30$, as well as the second session, $r_2(152) = .47$, and assessed the correlation between these two composites. This correlation emerged as substantial, $r(140) = .70, p < .001$.

For the round-robin measures (agentic behaviour, communal behaviour, and status) I used a slightly different method. First, for each of these measures I calculated the correlation between each participant's ratings of the targets in the first session and that same participant's ratings of the targets in the second session. So, for example, I calculated the correlation between a given student's ratings of their class members in terms of dominant behaviour in the first session and that same student's ratings of their class members in terms of dominant behaviour in the second session. Thus, for a given student I calculated three between-session correlations: one for their ratings of their class members' agentic behaviour, another for communal behaviour, and a third for status. Next, for each measure, I normalized the resulting correlations using a Fisher r to z' transformation, averaged the resulting values across participants, and finally back-transformed that average. Having followed this procedure, agentic behaviour ($r = .76$), communal behaviour ($r = .65$), and status ($r = .79$) all emerged as substantially correlated across sessions.

Merging the data. Having found adequate test-retest reliability, I merged the data across the two data collection sessions for agentic behaviour ($M = 7.13$, $SD = .93$), communal behaviour ($M = 7.86$, $SD = 1.12$), status ($M = 4.29$, $SD = .57$), and hierarchy type ($M = 2.74$, $SD = .93$). To maximize the number of participants, as well as the reliability of the scores, I did so using single scores for participants who had only taken part in one of the sessions, and averaging scores across sessions for participants who had taken part in both.

SOREMO analysis. I used SOREMO (Kenny, 1994) to compute composite peer ratings from the round-robin measures. SOREMO separates target scores (i.e., how a student is typically perceived by other students) from perceiver scores (i.e., how each student typically views other students) and relationship effects (i.e., how people in each dyadic relationship idiosyncratically perceive each other), making them suitable for analyses that assume independence. SOREMO prohibits missing data. Therefore, for each datum I inserted the average peer-ratings for that participant and measure, before computing composite peer ratings of agentic behaviour ($M = 7.08$, $SD = 1.79$), communal behaviour ($M = 7.69$, $SD = 1.28$), and status ($M = 4.29$, $SD = .82$). Having done this, relative target variances confirmed above-chance agreement (all $ps < .05$) between students on each other's agentic behaviour (relative variance = .44), communal behaviour (relative variance = .21), and status (relative variance = .36), suggesting adequate quality of the round-robin data.

Multilevel analysis. I first calculated class-level hierarchy type scores by averaging ratings per class ($M = 2.68$, $SD = .38$), after a one-way ANOVA revealed that the hierarchy type varied significantly across classes, $F(9, 160) = 2.43$, $p = .013$. Then, following the procedure outlined by Baron and Kenny (1986) as well as taking

into account the nesting of the data in classes, I used the SPSS mixed models function to test the hypotheses in a series of models (Table 3.1).

In Model 1A, I included composite peer ratings of agentic behaviour and communal behaviour, as well as individual ratings (control variable) and class-level averages of group hierarchy type, as predictors of students' status in their class. As predicted, I found that agentic behaviour predicted status, $F(1, 170) = 103.60, p < .001$: the more agentic a participant's behaviour, the higher was their status. Also as predicted, I found that communal behaviour did not predict status, $F(1, 170) = .67, p = .415$. Individual ratings of hierarchy type also did not predict status, $F(1, 170) = .70, p = .792$. However, there was a marginal effect such that hierarchy type (marginally) negatively predicted status, $F(1, 170) = 3.85, p = .051$: the more prestige-based (less dominance-based) a class hierarchy was the (marginally) higher (on average) the status was of students in the class.

Rerunning this analysis while including class as a random effect (in Model 1B), did not substantially change the results. Moreover, a limited decrease in the -2^* log likelihood of the model indicated that taking into account the nesting of the data in classes did not significantly improve the model, $\chi^2_{\text{Change}} = -2.05, p > .05$.

In Model 2A, I again re-did the original analysis, including the interaction between communal behaviour and class-level hierarchy type as independent variable. Including the interaction effect significantly improved the model, $\chi^2_{\text{Change}} = -5.55, p < .05$. Moreover, as predicted, the interaction was significant, $F(1, 170) = 5.64, p = .019$. Rerunning this analysis while including class as a random effect (Model 2B), again did not substantially change the results. Moreover, again a limited increase in the -2^* log likelihood of the model indicated that taking into account the nesting of the data in classes did not significantly improve the model, $\chi^2_{\text{Change}} = -.77, p > .05$.

To plot the interaction between communal behaviour and class hierarchy type for interpretative purposes, I used the beta values from a hierarchical regression to calculate slopes one standard deviation above and below the mean (Aiken & West, 1991). The overall pattern supported Hypothesis 3.2: whereas communal behaviour predicted higher status in more prestige-based hierarchies, it predicted lower status in more dominance-based hierarchies (Figure 3.1). However, *t*-tests on the simple slopes revealed that only the latter effect was significant, $t(63) = -2.17, p = .02$, not the former, $t(63) = 0.81, p = .21$.

Discussion

Study 3.1 confirmed the importance of group hierarchy type as a moderator of the behaviour-status link. Agentic behaviour predicted status across hierarchy types, supporting Hypothesis 3.1. Communal behaviour predicted status only depending on hierarchy type, supporting Hypothesis 3.2. Moreover, it negatively predicted status in relatively dominance-based hierarchies. However, it was unrelated to status in relatively prestige-based hierarchies.

Study 3.2

Study 3.1 generally supported the hypotheses in an ecologically valid context and thus provided support for the real-life relevance of the findings. However, a possible limitation of this design was that the characteristics of existing groups may be naturally confounded. Study 3.2, using an experimental design, served to move beyond the possible confounds associated with naturally occurring groups. Specifically, independently manipulating hierarchy type, agentic behaviour and communal behaviour in hypothetical situations served to clarify how they might

interact to predict status, and allowed us to assess potential causal effects of behaviour on status in the different hierarchy types.

Like in Study 2.1, participants rated their *perception* of the status of a person whose interactions with others in a group were described to them in a vignette rather than a person they personally interacted with. Therefore, participants' needed to imagine what it would be like to be a member of the group in order to rate the person's status. In Study 2.1 I facilitated this process situating the vignette in a context (a student association) that was highly familiar to participants in the study (University students).

Participants and Procedure

Undergraduate students ($N = 183$; 141 females, 38 males, 4 unreported; $M_{age} = 19.43$, $SD = 2.19$) took part in a 2 (Hierarchy Type: dominance-based, prestige-based) x 2 (Agentic Behaviour: low, high) x 2 (Communal Behaviour: low, high) between participant study.

Participants read a description of a fictional student society "Vincentus". In the dominance-based hierarchy condition, the society was described as one where "assertive personalities claim a leading role for themselves" and "people can achieve something by suppressing and dominating others". In the prestige condition it was described as a society in which "credible personalities are given a leading role" and "people can achieve something if others respect and trust you". (See Appendix 3.3 for the complete Hierarchy Type manipulations)

Participants then read one of four target descriptions of a Vincentus member, Kim (a gender-neutral Dutch name). Depending on condition, Kim's description included behaviours that were either high or low in agency and either high or low in communion. These behaviours were randomly selected from the associated scales of

the Social Behaviour Inventory (SBI: Moskowitz, 1994) and combined to form descriptions. For example, the high-agentic behaviour, high-communal behaviour condition described Kim as “someone who speaks with a firm, clear voice” as well as someone who “compliments or praises others”. (See Appendix 3.4 for the complete Behaviour Type manipulations)

Measures

To check whether the behaviour manipulations were successful, participants rated Kim’s behaviour from *not at all* (1) to *very much* (7) on four items, two assessing agentic (*dominant* and *submissive* [reversed-scored]) behaviour, $M = 4.06$, $SD = 2.04$, $r(187) = .81$, and two communal (*friendly* and *unkind* [reversed-scored]) behaviour, $M = 4.91$, $SD = 1.56$, $r(187) = .85$.

Participants then rated the level of status they felt Kim had within Vincentus from *not at all* (1) to *very much* (7) on two items ($M = 3.73$, $SD = 1.86$, $r(187) = .95$): “*Kim is someone who has a lot of status*” and “*Kim is someone who ranks highly*”

Finally, to check whether the hierarchy type manipulations were successful, participants rated Vincentus’ hierarchy type on the two-item measure used in Study 3.1 ($M = 4.49$, $SD = 1.95$, $r[187] = .74$).

Results and Discussion

Manipulation checks. The hierarchy type manipulation was successful. A 3-way Hierarchy Type x Agentic Behaviour x Communal Behaviour ANOVA on the hierarchy type measure revealed that participants in the prestige-based condition perceived Vincentus as more prestige-based (i.e., less dominance-based; $M = 2.96$, $SD = 1.51$) than participants in the dominance-based condition ($M = 5.99$, $SD = .84$), $F(1,180) = 288.36$, $p < .001$, $\eta^2 = .62$. No other effects were significant.

A 3-way ANOVA on the behaviour measures revealed that participants rated Kim's behaviour as more agentic in the high Agentic Behaviour condition ($M = 5.80$, $SD = .97$) than in the low Agentic Behaviour condition ($M = 2.30$, $SD = 1.11$), $F(1,180) = 731.88$, $p < .001$, $\eta^2 = .80$, and as more communal in the high Communal Behaviour condition ($M = 6.12$, $SD = .69$) than in the low Communal Behaviour condition ($M = 3.72$, $SD = 1.24$), $F(1,180) = 274.47$, $p < .001$, $\eta^2 = .60$. Thus, the manipulation worked as intended.

However, there was also a modest cross-over effect, such that participants rated Kim's behaviour as less communal in the high Agentic Behaviour condition ($M = 4.66$, $SD = 1.53$) than in the low Agentic Behaviour condition ($M = 5.17$, $SD = 1.56$), $F(1,180) = 10.83$, $p = .001$, $\eta^2 = .06$, and less agentic in the high Communal Behaviour condition ($M = 3.47$, $SD = 1.85$) than in the low Communal Behaviour condition ($M = 4.46$, $SD = 2.06$), $F(1,180) = 74.91$, $p < .001$, $\eta^2 = .29$. No other effects were significant.

Status attainment. As predicted, a 3-way ANOVA on the status measure (Figure 3.2) yielded a main effect of Agentic Behaviour on ascribed status, $F(1,179) = 208.18$, $p < .001$, $\eta^2 = .54$, such that ascribed status was higher in the high Agentic Behaviour condition ($M = 4.98$, $SD = 1.49$) than in the low Agentic Behaviour condition ($M = 2.47$, $SD = 1.24$). A two-way interaction between Hierarchy Type and Agentic Behaviour also emerged, $F(1,179) = 7.72$, $p = .006$, $\eta^2 = .04$. Simple effects analysis revealed that Agentic Behaviour promoted ascribed status more strongly in the dominance-based condition, $F(1,179) = 148.77$, $p < .001$, $\eta^2 = .45$, than in the prestige-based condition, $F(1,179) = 67.53$, $p < .001$, $\eta^2 = .27$. However, as predicted, both effects were significant.

Communal behaviour had no direct effect on ascribed status, $F(1,179) = 2.00$, $p = .159$, $\eta^2 = .01$, but, again as predicted, Hierarchy Type and Communal Behaviour interacted to predict ascribed status, $F(1,179) = 43.54$, $p < .001$, $\eta^2 = .20$. Simple effects analysis revealed that, in the dominance-based condition, ascribed status was higher in the low Communal Behaviour condition ($M = 4.18$, $SD = 1.88$) than in the high Communal Behaviour condition ($M = 3.21$, $SD = 1.67$), $F(1,179) = 13.51$, $p < .001$, $\eta^2 = .07$, whereas in the prestige-based condition, ascribed status was lower in the low Communal Behaviour condition ($M = 3.08$, $SD = 1.72$) than in the high Communal Behaviour condition ($M = 4.44$, $SD = 1.83$), $F(1,179) = 31.95$, $p < .001$, $\eta^2 = .15$. Thus, Hypothesis 3.2 was also supported.

A three-way interaction on ascribed status also unexpectedly emerged, $F(1,179) = 13.38$, $p < .001$, $\eta^2 = .07$. Simple effects analysis revealed that agentic behaviour predicted ascribed status in both the dominance-based and the prestige-based conditions, and at both high and low levels of communal behaviour ($ps \leq .001$). However, in both hierarchy types, communal behaviour predicted status when agentic behaviour was high ($ps < .001$), but not when it was low ($ps \geq .134$), possibly because agentic behaviour, because of its active nature, multiplies the impact of communal behaviour.

Overall, agentic behaviour increased ascribed status in both hierarchy types, supporting Hypothesis 3.1. Moreover, hierarchy type moderated the effect of communal behaviour on ascribed status, supporting Hypothesis 3.2, for whereas in prestige-based hierarchies it augmented status, in dominance-based hierarchies it diminished status. Nonetheless, this moderation only emerged when agentic behaviour was high.

General Discussion

In this chapter I investigated what people need to *do* to attain status. Does exhibiting agentic (i.e., assured, dominant) behaviour or exhibiting communal (i.e., warm, agreeable) behaviour increase status? The answer is: it depends on the type of hierarchy present in a group. In Chapter 2 I found that group hierarchies vary from being more dominance-based—where status is grabbed by the few—to being more prestige-based—where status is granted by the many. I hypothesized that, although agentic behaviour should promote status in both types of hierarchies, communal behaviour should augment it in more prestige-based hierarchies but diminish it in dominance-based hierarchies. I confirmed the hypotheses in a field-study of naturally occurring groups (Study 3.1) and in an experiment where the hierarchy type of hypothetical groups was manipulated (Study 3.2).

Each of these methods has its limitations as well as its strengths. For example, the ecologically valid context used in Study 3.1 limited the possibilities for independently manipulating each of the independent variables or testing causality, but also allowed me to demonstrate the importance of my findings in naturalistic settings. Similarly, the hypothetical groups used in Study 3.2 was limited to the extent that my dependent variable measured ascribed rather than actual status, but also allowed me to move beyond the natural confounds of Study 3.1. Moreover, the limitations associated with each of the studies were generally addressed by combining both designs, and thus achieving both external and internal validity.

Study 3.2 also revealed that, in both hierarchy types, agentic behaviour promoted (ascribed) status at high as well as low levels of communal behaviour. In contrast, in both hierarchy types, communal behaviour impacted status only when

agentic behaviour was high. Possibly, the active nature of agentic behaviour multiplies the impact of communal behaviour. Most people feel more appreciated when someone openly compliments them than when someone quietly values them; likewise, people might feel more spurned when someone openly faults them than when someone quietly criticizes them. Agentic behaviour, it seems then, not only affects status directly, it also increases both the benefits and the pitfalls of communal behaviour. Thus, while agentic behaviour goes some way in helping one to the top, getting all the way there requires it to be teamed with the right type of communal behaviour.

I believe these findings advance theory in several ways. In particular, distinguishing the two hierarchy types may clarify why some research finds that high-status individuals engage in angry and quarrelsome behaviour (Fournier et al., 2002; Tiedens, 2001), show little interpersonal sensitivity (Galinsky, Magee, Ines, & Gruenfeld, 2006) or compassion (Van Kleef, Oveis, Van Der Löwe, et al., 2008), whereas other research finds that high-status individuals are highly interested in other people (Overbeck & Park, 2001), engage in generous and friendly behaviour (Flynn et al., 2006), and show sensitivity to their emotions (Schmid Mast, Jonas, & Hall, 2009). In the former cases, the groups studied may have been characterized by more dominance-based hierarchies; in the latter cases they may have been characterized by more prestige-based hierarchies.

The findings also have obvious implications for how the type of group hierarchy—dominance-based or prestige-based—determines how leaders can best pursue status. Such group hierarchies are not set in stone, but internal and external forces often render them highly resistant to change. For example, dominance-based hierarchies ruled by tyrants may be welcomed in times of crisis (Schlessinger, 1986).

Here, the greater power wielded by dominant leaders may permit them to parry external threats or overcome logistical challenges more decisively, unencumbered by a need for consultation or compromise. Once established, however, such tyrants may be hard to dispose of. As the wave of Middle East uprisings in 2011 illustrates—persistent domination ultimately sparks resistance from lower-ranking group members, prompting attempts to implement a more prestige-based hierarchy (Boehm, 1999; Van Vugt et al., 2004). However, those lower in rank may need to exert substantial efforts and take considerable personal risks to overthrow a hierarchy rooted in dominance and replace it with one rooted in prestige. When they do, the opportunity arises for status to be based on collectively recognized merit, rather than on brute force.

CHAPTER 4

Self-Regard and Behavioural Strategies: Do Self-Esteem and Narcissism Relate to Alternative Ways of Getting Ahead?

People who feel good about themselves strive for status more decidedly and more ambitiously than people who feel less good about themselves (Gilbert et al., 1995). For example, they persist harder and longer on tasks (Di Paula & Campbell, 2002; McFarlin, Baumeister, & Blascovich, 1984; Shrauger & Sorman, 1977, Study 1), and are more likely to seek competence feedback following failure (Vohs & Heatherton, 2001, Study 1). Moreover, they are more likely to voice their opinions in groups (LePine and Van Dyne, 1998) and less likely to give in to persuasion by others (Brockner, 1983; Janis, 1954; McFarlin et al., 1984). In other words, people with positive self-views not only work harder to get ahead than people with less positive self-views; they are also more willing to speak up and stand their ground.

As I have empirically demonstrated in the previous chapters, there are multiple strategies for getting ahead. Importantly, people may grab status – intimidate others with high agency/low communion behaviour – or convince others to grant them status – attract followers with high agency/high communion behaviour (for details of these strategies see Chapter 3). However, it remains unclear *which people* are likely to engage in each of these status-promoting strategies. While people's level of status has been linked to their level of self-regard (Cheng et al., 2010a; Kirkpatrick & Ellis, 2001; Leary & Baumeister, 2000), research has not yet unambiguously established whether different self-appraisals are related to different status-promoting behaviours. In this chapter, I assess how the self-appraisals of people who grab status differ from those of people who persuade others to grant them status.

Two Types of Self-Regard

I use the term “self-regard” here to refer to an affectively laden appraisal of the self as a whole. In line with James’s (1890/1950) original conceptualization, I construe this appraisal as resulting from a judgment of the overall self against an evaluative standard. I will discuss the possible nature of this self-appraisal, and the standard used to make it, shortly. For now I simply contend that, if the self is appraised positively against an evaluative standard, a person will feel good about him- or herself and experience high self-regard. If the appraisal is neutral or even negative, a person will experience low self-regard.

This general definition of self-regard closely resembles commonly used definitions of self-esteem (e.g., Baumeister, 1998; Blascovich & Tomaka, 1991; Kwan & Mandisotza, 2007). However, I contend that it can also encompass narcissism¹, or the “dark side” of self-esteem (Paulhus, Robins, Trzesniewski, & Tracy, 2004). I am not the first to define self-esteem and narcissism as two alternative types of self-regard. Other researchers have made distinctions with a similar underlying theme (Paulhus et al., 2004) between self-appraisals that are realistic, adaptive, genuine, secure, or non-defensive versus unrealistic, maladaptive, fragile, or defensive (Baumeister, Campbell, Krueger, & Vohs, 2003; Block & Thomas, 1955; Kernis, 2003; Paulhus et al., 2004; Salmivalli, Kaukiainen, Kaistaniemi, & Lagerspetz, 1999; Tracy & Robins, 2003).

Although both self-esteem and narcissism are appraisals of the self, the type of self-judgment they represent differs on a number of dimensions. I will argue here that the main difference between self-esteem and narcissism revolves around the *ambition* of their self-judgments: whether they are judging success in terms of meeting a standard or in terms of exceeding one. To validate this claim, and further

delineate the differences between self-esteem and narcissism, I will make use of a bottom-up approach: I will derive characteristic features of the two constructs from the scales commonly used to measure them (see Kwan & Mandisodza, 2007, for a similar approach).

My analysis of scales used to measure self-esteem and narcissism is described below. However, before presenting this analysis, it is important to point out that this characterization of self-esteem and narcissism as distinct types of self-regard explicitly seeks to emphasize their differences. In reality, the distinction I make is a matter of degree rather than an absolute difference of kind. Thus, self-esteem is *more* a judgment of the self as meeting standards *than* a judgment of the self as exceeding standards, with the reverse being true for narcissism. This qualification is necessary, because the types of self-judgment characterizing self-esteem and narcissism are not fully independent: making judgments of the self as meeting standards (i.e., self-esteem) logically entails making judgments of the self as exceeding standards (i.e., narcissism).² When people judge themselves to be better than a standard, it implies they judge themselves to be as good as that standard. Similarly, when people judge themselves as worse than a standard, it implies they also judge themselves not to be exceeding it. Thus, these two types of judgments partly overlap.

Characterizing self-esteem. The *Rosenberg Self-Esteem Scale (RSES*; Rosenberg, 1965) is the most commonly used measure of global self-esteem and is the standard against which new scales are compared (Blascovich & Tomaka, 1991; Kwan & Mandisodza, 2007). For this reason, I use the RSES to characterize self-esteem and distinguishing it from narcissism. The RSES was designed to measure self-worth or self-acceptance. It consists of ten items that are scored on a continuous

scale. Typical items ask participants to indicate to what extent they are “satisfied” with themselves, “respect” themselves, or feel that they are “a person of worth”.

The items on the RSES emphasize meeting standards rather than exceeding them (see also Appendix 4.1). Five items assess to what extent people *fail to meet* a standard by asking to what extent they feel they are “no good”, “a failure”, “useless”, “do not have much to be proud of”, or wish they could “have more respect” for themselves. Four further items measure to what extent people *meet* a standard by assessing to what extent they are “satisfied” with themselves, take “a positive attitude toward” themselves, have “a number of good qualities, or can do things “as well as” other people. One item is more ambiguous as it asks people to rate to what extent they feel they are “a person of worth”, as well as “at least on an equal plane with others”, suggesting both elements of *meeting* a standard (being of worth) as *exceeding* one (by being *at least* on the same plane as others). In general, however, the RSES measures to what extent people live up to (as opposed to fall behind) standards, rather than to what extent they challenge and exceed them.

Characterizing narcissism. The most commonly used measure of narcissism is the 40-item *Narcissistic Personality Inventory (NPI-40)*; Raskin & Terry, 1988). Of the seven factors identified by Raskin and Terry (1988), *Superiority*, *Authority*, *Self-sufficiency*, and *Exploitativeness* all imply that the self is in some way *exceeds* a comparison standard (see also Box 4.1). For example, being “an extraordinary person” (and thus more special than others), being “a leader” (and thus superior to those being led), being “more capable than other people”, or being able to “read people like a book” (and thus more smart and cunning than those people), all imply that a person is in some way exceeds other people. The factors *Exhibitionism* and *Vanity* do not directly reflect whether someone *feels* better than a standard, but they

arguably imply a *desire* to be compared to such a standard, as well as the *confidence* that such comparison will be favourable for the self. For example, people might lead others to compare them to a standard by placing themselves at the “centre of attention” or lead themselves to make such a comparison as they look “in the mirror”. The last factor, *Entitlement*, with items like “I have a strong will to power” and “I want to amount to something in the eyes of the world”, implies a desire to exceed commonly accepted standards, as well as confidence in one’s ability to achieve this.

States and traits. I will use the term self-regard to refer to a state as well as a trait. In line common views of self-esteem, I perceive state self-regard as fluctuating around a relatively stable trait base (e.g., Baumeister, 1998). Research generally supports this view. The stability of trait levels of self-esteem over the life-span is comparable to that of trait measures of personality (Trzesniewski, Donnellan, & Robins, 2003). Moreover, trait self-esteem shows resilience to decline in the face of life adversities like those associated with aging (Brandstadter & Greve, 1994). However, small and reversible state level fluctuations occur in different (relational) contexts (Denissen, Penke, Schmitt, & van Aken, 2008; Harter, Waters & Whitesell, 1998; Wells, 1988), or as a result of changes in the environment like failure feedback (Arndt & Greenberg, 1999; Vohs & Heatherton, 2001) and exclusion from groups (Leary et al., 2003; Leary, Tambor, Terdal, & Downs, 1995).

Trait narcissism is a well-studied construct, and the stability of trait narcissism has received support (e.g., $\alpha = .72$ over an 8 week period: Raskin & Hall, 1981, cited in Emmons, 1987). State narcissism is a relatively new area of research, but some first results support the existence of meaningful state fluctuations. For example, narcissism scores were higher after participants had visualized a time when

they “impressed someone” or completed a word-nonword judgment task containing words relating to superiority (e.g. beautiful, smart) than when they visualized a time when they “felt accepted and/or included” or completed a word-nonword judgment task containing words relating to acceptance (e.g., accepted, wanted) (Sakellaropoulo & Baldwin, 2007). Moreover, given the correlation between narcissism and self-esteem and the similarities between the constructs, and given that numerous studies provide support for a characterization of self-esteem as having these two dimensions, it seems at least likely that narcissism can be characterized in the same way. In this chapter, self-esteem and narcissism will be assessed at both the trait (Studies 4.1 and 4.2) and the state level (Study 4.3).

Self-Regard and Status-Promoting Behaviours

Before formulating hypotheses about the relations between self-regard and status-promoting behaviours, I first want to point out the general affinities between self-regard and status. As outlined in Chapter 2 and Chapter 3, grabbing status in a dominance-based hierarchy involves an individual defeating others in an aggressive contest for status. Thus, to attain status in a dominance-based hierarchy one needs to *exceed* other people, and one needs to be willing to do so *forcefully*. As I just argued, narcissism can be characterized as a motivated appraisal of the self as exceeding norms (e.g. those set by other people). It reflects both a strong *sense* of being glorious and a strong *desire* for personal glory (cf. Sedikides & Gregg, 2001). This desire is so strong that narcissists may be willing to misuse others to get the recognition they crave (Paulhus & Williams, 2002; Sedikides, Campbell, Reeder, Elliot, & Gregg, 2002), and react aggressively when they are criticized (Bushman & Baumeister, 1998; Twenge & Campbell, 2003). As such, narcissism may be associated with both a strong belief that one is suited for the highest place in a

dominance-based hierarchy, and a strong motivation to claim such a position, even against the will of others.

A similar observation can be made about self-esteem and prestige-based status. As I have argued in Chapter 3, in order to convince others to freely grant one status in a prestige-based hierarchy one needs to persuade others one is *worthy* of their support and one needs to treat them with *respect*. In other words, an individual needs to earn the appreciation and respect of others, but also to show some level of appreciation and respect for those same others. As I just argued, self-esteem can be characterized as an appraisal of the self as meeting standards, rather than challenging or exceeding them. Thus, where narcissists feel superior, people with high self-esteem simply feel good enough. Translating this to an interpersonal context, the sense of superiority associated with narcissism means narcissists combine a positive view of themselves with a derogatory view of others (Morf & Rhodewalt, 1995). In contrast, the sense of worthiness associated with self-esteem implies people with high self-esteem have a positive view of themselves that does not necessitate a negative appraisal of others. As such, self-esteem may be associated with both a belief that one is worthy of a high place in a prestige-based hierarchy, and a sense of appreciation and respect for others that could prohibit aggressively challenging these others or treating them disrespectfully.

Given the general affinity between narcissism and dominance-based status (see also Cheng et al., 2010a), I first hypothesize there will be a positive correlation between narcissism and the behaviours that promote status in dominance-based hierarchies. In other words, narcissism should be positively related to agentic behaviours and negatively to communal behaviours (Hypothesis 4.1). Second, given the general affinity between self-esteem and prestige-based status (see also Cheng et

al., 2010a), I hypothesize that self-esteem will be positively related to the behaviours that promote status in prestige-based hierarchies. In other words, self-esteem should be positively related to both agentic and communal behaviours (Hypothesis 4.2).

Although these hypotheses have not been investigated directly, existing research provides some support. For example, people with high self-esteem tend to describe themselves both in relatively agentic terms (e.g., extraverted: Campbell, Rudich, & Sedikides, 2002, Study 1) and relatively communal ones (e.g., agreeable: Campbell et al., 2002, Study 1; low in aggression: Locke, 2008; Paulhus et al., 2004). After receiving negative feedback, people with high self-esteem, are perceived as more antagonistic and less likeable than people with low self-esteem (Heatherton & Vohs, 2000; Vohs & Heatherton, 2001). However, when narcissism is controlled for to create a purer measure of self-esteem (Paulhus et al., 2004), self-esteem relates inversely to derogation and hostile feelings towards the evaluator, following negative feedback (Smalley & Stake, 1996). These latter results imply that controlling for narcissism may be essential for revealing the true relation between self-esteem and interpersonal behaviour (but see Heatherton & Vohs, 2000). I will address this issue in the studies.

Conversely, narcissism is not only correlated with self-perceptions (extravert: Campbell et al., 2002, Study 1) and others-perceptions (self-assured and dominant: Back, Schmuckle, & Egloff, 2010) of being agentic, it also correlates with self-reports and acts of aggression (Bushman & Baumeister, 1998; Locke, 2008; Paulhus et al, 2004; Smalley & Stake, 1996).

Method

I tested my hypotheses in three studies. The first two studies (Study 4.1 and 4.2) aimed to provide strong support for the hypothesized relations. Both studies tested the hypotheses at the trait level. In accord with my aforementioned hypotheses, I assessed whether trait self-esteem was positively related to trait-level agentic and communal behaviour, and whether trait narcissism was positively related to trait agentic behaviour but negatively to trait communal behaviour. In order to provide strong support for these relations, I used different measures of the main variables across these studies. Moreover, to avoid any connection between the measures of self-regard and those of interpersonal behaviour, participants in Study 4.2 completed these measures in two separate sessions that were considerably separated in time and that had unrelated ostensive purposes.

The third study (Study 4.3) was included to provide further support for a *unique* relation between the different types of self-regard and the different status-promoting behaviours. As such, it adds importantly to the first two. I investigated the uniqueness of the hypothesized relations in this study by assessing the hypothesized relations at the state level. My reasoning was that if I found that certain situations were associated with both a change in the level of a given type of self-regard, and of the behaviours that I hypothesized were associated with that type of self-regard, this would provide strong support for a unique and strong relation between the two. Plausible support for the uniqueness of the relations between self-regard and behaviour might also have been obtained by controlling for any covariates of self-esteem and narcissism that theoretically might mediate these relations. However,

creating an exhaustive list of such possible covariates would be difficult, whereas my chosen method has the advantage of being methodologically succinct.

Study 4.1: Contrasting Self-Esteem and Narcissism as Predictors of Status-Relevant Interpersonal Behaviour

Study 4.1 was run over the Internet and relied on standard measures of the main variables. It contained two samples. Participants in Sample A completed a measure of self-esteem, narcissism, and interpersonal behaviour. As measures of self-esteem differ in the level at which they correlate with narcissism and trait dominance (Brown & Zeigler-Hill, 2004), I wanted to make sure that any findings generalized across different measures of self-esteem. Therefore, a second group of participants (Sample B) filled out an alternative measure of self-esteem together with the same measure of interpersonal behaviour.

Participants and procedure. 288 participants took part over the Internet. An analysis of the IP addresses revealed one duplication suggesting that one of the participants had taken part in the study twice. The chronologically second set of data of this participant was removed. I assumed all other participants took part only once.³

Participants for Sample A were recruited university-wide at the University of Southampton and were entered into a prize draw for four prizes of 25 GBP. This sample contained 159 (106 female, 53 male) participants ranging in age from 18 to 54 ($M = 23.06$, $SD = 6.18$).

Participants for Sample B were recruited among undergraduate students in psychology at the University of Southampton (26.6%) and via a number of well-established online research websites (e.g., <http://genpsylab-wexlist.unizh.ch>, <http://psych.hanover.edu/research/exponent.html> and <http://www.onlinepsychresearch.co.uk>). University students took part in return for

course credit whereas external participants took part voluntarily. This sample contained 128 (102 female, 25 male, 1 unreported) participants ranging in age from 16 to 61 ($M = 25.91$, $SD = 10.19$).

Measures. Participants completed the measures in a fixed order. Descriptive statistics are reported in Table 4.3.

Self-esteem. Participants in Sample A first completed the revised version of the Self-Liking/Self-Competence Scale (*SLCS-R*; Tatarodi & Swann, 2001). Eight items measuring self-liking (e.g., “I am secure in my sense of self-worth”) and eight items measuring self-competence (e.g., “I am highly effective at the things I do”) were rated from *strongly disagree* (1) to *strongly agree* (7). Averages across the items were calculated to create composite scores of respectively self-liking, self-competence, and overall self-esteem (all items).

Participants in Sample B completed the Rosenberg Self-Esteem Scale (*RSES*; Rosenberg, 1965). Ten items (e.g., “On the whole, I am satisfied with myself”) were rated from *strongly disagree* (1) to *strongly agree* (7), and averaged to create a composite score of self-esteem.

Narcissism. Participants in Sample A then completed a short measure of narcissism (*NPI-16*; Ames, Rose, & Anderson, 2006). Participants read 16 pairs of self-descriptive statements and selected the statement from each pair that best described them. To create a narcissism composite score, I assigned one point for each narcissistic statement they selected (e.g., “I think I am a special person”), zero points for each non-narcissistic statement they selected (e.g., “I am no better or no worse than most people”), and computed the average of the points assigned across the 16 items.

Interpersonal behaviour. Finally, all participants completed a trait version of the Social Behaviour Inventory (SBI: Moskowitz, 1994). The SBI is based on an interpersonal circumplex model of behaviour (e.g., Wiggins, 1979). It consists of behavioural items that reflect the poles of two orthogonal dimensions: *agency* (dominant versus submissive behaviour), and *communion* (agreeable versus quarrelsome behaviour).

The adapted version of the SBI used here, asks people to rate how characteristic (1 = *not at all*; 7 = *very much*) different behaviours are for them when interacting with peers in a group setting. The *agentic* (e.g., “I make suggestions”, “I wait for other people to act or talk first”, reversed-scored), and *communal* (e.g., “I compliment or praise other people”, “I discredit what others say”, reversed-scored) axes of the circumplex are each represented by 24 behaviours. As in the original measure, one type of behaviour (“I criticize others”) is classed as both high in agency and low in communion, and one type of behaviour (“I go along with the others”) is classed as both high in communion and low in agency, rendering the total number of behaviours in the scale to 46.

Results and Discussion

As predicted, both the measures of self-esteem⁴ and the lone measure of narcissism correlated positively with agentic behaviour (see Table 4.4). In addition, as predicted, narcissism correlated negatively with communal behaviour. However, neither measure of self-esteem correlated with communal behaviour (see Table 4.4). Thus, while the results confirmed my predictions for agentic behaviour, this was only partially the case for communal behaviour. Moreover, the results were in line with my predictions for narcissism, but this was only partially the case for self-esteem.

To control for contamination of the results due to the correlation between self-esteem and narcissism (Paulhus et al., 2004), I subsequently re-calculated the correlations for Sample A while mutually controlling for self-esteem and narcissism. Thus, I calculated partial correlations between self-esteem and the two types of behaviour, controlling for narcissism, as well as between narcissism and the two types of behaviour, controlling for self-esteem (see Table 4.4).

In the agentic domain, mutual partialling reduced the strength of the relations, but this effect was only minor and the relations all remained significant. Thus, after partialling for narcissism, self-esteem was still positively correlated with agentic behaviour, and the same was true for narcissism after partialling for self-esteem. This suggests that, in the agentic domain, the correlation between self-esteem and reported behaviour, as well as that between narcissism and reported behaviour, were both largely independent of one another.

In the communal domain, mutual partialling had a stronger impact on the results, albeit only on some of them. Whereas partialling for self-esteem did not affect the strength of the negative correlation between narcissism and communal behaviour, partialling for narcissism did affect the strength of that between self-esteem and communal behaviour: after partialling for narcissism self-esteem became positively correlated with communal behaviour. These results suggest that, the correlation between genuine self-esteem (when measured with the SLCS-R) and communal behaviour was partially obscured by the correlation between narcissism and reported communal behaviour. Therefore, controlling for narcissism brought out the relation between self-esteem and communal behaviour, whereas the correlation between narcissism and communal behaviour held regardless of whether self-esteem was controlled for or not.

A More Concrete Measure of Behavioural Strategies for Getting Ahead

Study 4.1 provided initial support for the hypotheses. After mutually controlling for self-esteem and narcissism, I found that self-esteem was positively correlated with both self-reported agentic behaviour and self-reported communal behaviour, whereas narcissism was positively correlated with self-reported agentic behaviour and negatively correlated with self-reported communal behaviour. I sought to corroborate these findings in a second study using an alternative and more concrete measure of status-promoting behaviours. To do so, I developed six vignettes (see Appendix 4.1).

Each vignette consisted of a short description of a realistic and vivid situation, involving a mild social conflict to which participants might react in different ways. The vignettes varied in terms of their setting (work/social), the type (demanding/quarrelsome) and level (clear/ambiguous) of abrasive behaviour displayed, and the target of that behaviour (self/others). They described situations that are relatively common to allow people to identify with them easily. For example, in one vignette two colleagues angrily discuss the behaviour of a third colleague who is not present, and in another, siblings disagree about what birthday gift to buy for their grandmother.

I avoided descriptions that would make some of the possible reactions to the vignettes a priori more or less liable. For example, as behaviour is affected by social context, and may be especially sensitive to social role and hierarchical position (Fournier et al., 2002; Moskowitz, Suh, & Desaulniers, 1994), the vignettes all described status-neutral interactions with peers.

Each vignette was paired with four possible behavioural responses, each reflecting a different quadrant of the interpersonal circumplex. That is, the response options were designed to be respectively (a) high in both agency and communion, (b) high in agency and low in communion, (c) low in agency and high in communion, and (d) low in both agency and communion. In other words, rather than measuring agentic and communal behaviours separately, the vignette-based measure assessed behaviours in the agentic and communal domains simultaneously. There were several reasons for choosing this approach.

First, since prestige-based status is attained by attracting followers, it should be positively related to behaviour that is *simultaneously* high in both agency and communion. Similarly, since dominance-based status is attained by intimidating subordinates, it should be associated with behaviour that is *simultaneously* high in agency and low in communion. Thus, the vignette-based measure allowed me to test the exact combination of behaviours that I hypothesized.

Second, in real-life settings, it is natural for people to judge targets along both the agentic and communal dimension (Fiske et al., 2007). Accordingly, I created a study featuring all four logical combinations.

Finally, this measure of behaviour differed markedly from that used in the first study. Thus, I felt that corroborating the hypotheses across these two studies would provide convincing support for the hypotheses.

Study P4.1: Pilot Study

To ensure that the vignettes accurately reflected the behaviours they were designed to assess, I conducted a pilot study.

Method

Participants and procedure. Fourteen participants (students and postgraduate researchers at the University of Southampton) took part in the pilot study. Postgraduate researchers took part voluntarily, whereas students were rewarded with research credits. Participants indicated that their level of familiarity with interpersonal circumplex models, rated on a scale from *no expertise at all* (1) to *very high level of expertise* (10), was very low ($M = 1.43$, $SD = 1.16$).

The 14 participants rated the extent to which each of the response options accompanying each vignette was *dominant* (i.e., high in agency), *submissive* (i.e., low in agency), *agreeable* (i.e., high in communion), and *quarrelsome* (i.e., low in communion). To do so, they were given a list of adjectives to describe each of these poles of the main axes of the circumplex. Specifically, they were told:

“Please read the list of adjectives provided below. They all refer to a dimension called XX.” These instructions were followed by the list of adjectives. For example for the dominant pole of the circumplex they received the following list: *“Assertive, Dominant, Forceful, Self-Assured, Domineering, Firm, Self-Confident, Persistent”*. The lists of adjectives were obtained from the IAS-R (Wiggins, Trapnell, & Phillips, 1988). The adjective list was followed by the following instructions *“Now read each of the vignettes and indicate on a scale from 1 (not at all) to 10 (very much), to what extent each of the response options (the choices A to D) is similar to the XX dimension. You may refer back to the description of the XX dimension as often as you need to.”*

Participants rated all the response options on one pole of the circumplex before moving on to the next and continued until they had rated all response options in terms of dominance, submissiveness, agreeableness, and quarrelsomeness. The

order of the circumplex poles was randomized across participants (For a similar procedure, see Moskowitz, 1994).

Results and Discussion

The vignettes were evaluated in two ways (see Appendix 4.1). First, I assessed inter-rater agreement. Following Moskowitz (1994), I calculated for each response option Cronbach's coefficient alpha between *raters* and across the different *poles* of the interpersonal circumplex (i.e. dominant, submissive, agreeable, and quarrelsome behaviour) rather than – as is usual – between items of a scale and across different participants⁵. This way I obtained a measure of the extent to which the raters agreed on the meaning of response options in terms of the interpersonal circumplex model.

For 23 of the 24 response options the agreement between raters was very high ranging between 0.85 and 0.98 (mean alpha: 0.94). For the final response option (Vignette 1, response option B) the inter-rater alpha was 0.69, suggesting that the meaning of this response option in terms of the interpersonal circumplex model was more ambiguous.

In addition to inter-rater agreement, I assessed dimensional accuracy for each response option: the extent to which raters thought that a given response option correctly reflected the poles of circumplex dimensions it was designed to represent. For example, if a response option was designed to be dominant/agreeable, I wanted to make sure it was rated high in both dominance and agreeableness.

The four different response options belonging to any given vignette are alternative reactions to the same situation. My main concern was to establish that each response option better represented the behaviours it was intended to measure than the alternative response options. In addition, each response option

simultaneously represents two types of behaviour (e.g., dominant behaviour and agreeable behaviour) and each of these behaviours is also represented by one of the other response options (i.e., dominant behaviour by the dominant/quarrelsome response option and agreeable behaviour by the submissive/agreeable response option). Therefore, I made separate assessments of dimensional accuracy for each type of behaviour, by requiring each response option to represent the behaviours it was designed to measure better than the two alternative responses that were *not* designed to measure either of those behaviours. So, for example, each dominant/agreeable response needed to be (a) rated as significantly more dominant than the submissive/agreeable and the submissive/quarrelsome alternatives, as well as (b) rated as significantly more agreeable than the dominant/quarrelsome and submissive/quarrelsome alternatives.

To determine whether this was the case, I first calculated, for each vignette, cut-off values for the dimensional accuracy of each type of behaviour. The cut-off value was set at one standard deviation above the average rating on a given type of behaviour for the set of response options reflecting the opposite pole of the circumplex dimension. Thus, a response option featuring dominance as one dimension was considered to accurately reflect dominant behaviour if it was rated at least one standard deviation higher in dominance than the two alternative response options featuring submissiveness as one dimension. Only one response option (Vignette 1, Response Option C) did not meet this criterion.

Thus, I decided to remove Vignette 1 from the analyses, retaining Vignettes 2-6. But overall, the pre-test results show that the raters agreed that each of the response options of the remaining vignettes accurately reflected the poles of the circumplex it was intended to represent.

Study 4.2: A Replication with a New Measure

The main goal of Study 4.2 was to replicate the finding from Study 4.1 using a distinctly different measure of interpersonal behaviour, and thus to corroborate the earlier findings. To achieve this, participants completed the vignette-based measure of agentic versus communal behavioural tendencies (i.e., the 5 vignettes I retained after pre-testing), as well as trait measures of self-esteem and narcissism.

The second goal of this study was to replicate the earlier findings whilst strictly avoiding that participants would suspect a connection between the different measures. To achieve this, participants completed the measures of self-esteem and narcissism in one session, and then completed the measure of interpersonal behaviour in a separate and seemingly unrelated session. Moreover, the second session took place approximately 4-5 months after the first session. Thus, the two sessions were not only seemingly unrelated, there was also a considerable time lag between the two.

Method

Participants and procedure. 63 undergraduate students (10 male, 53 female) from the University of Southampton took part in this study in return for course credit. Participants ranged in age from 18 to 25 ($M = 18.89$, $SD = 1.25$).

Participants completed the Rosenberg Self-Esteem Scale (*RSES*; Rosenberg, 1965) and the 40-item Narcissistic Personality Inventory (*NPI-40*; Raskin & Terry, 1988) as part of an online pre-test at the start of the academic year (for descriptive statistics see Table 4.5). They completed a second survey approximately 4-5 months later. This survey included demographic data, the vignettes and some questions

unrelated to this study. Participants were not aware of any connection between the two sessions.

For each vignette, participants indicated how likely they were to exhibit each of the behavioural responses (in percentages rounded to the nearest 10, adding up to 100% for each vignette) if they were faced with the situation described. They were given an unrelated example to clarify this procedure. In addition, a summation line was drawn under each set of response options as well as the words “100%” to remind them to distribute the correct total of percentages. Despite this reminder 14.8% of the participants failed to report percentages adding up to 100% for at least one of the vignettes. As removing these participants would substantially decrease the data available for analyses, I rescaled the relevant percentage scores so they added to 100% instead⁶. Following these adjustments, I calculated average percentage scores for each participant across the vignettes for each type of behaviour (see Table 4.5).

Results and Discussion

As predicted, self-esteem correlated positively with a self-reported preference for with high agency/high communion behavioural responses to a diverse set of situations, whereas narcissism correlated positively with a self-reported preference for high agency/low communion responses (see Table 4.6). Symmetrically, self-esteem correlated negatively with a self-reported preference for with low agency/low communion behavioural responses to a diverse set of situations whereas narcissism correlated negatively with a self-reported preference for low agency/high communion responses.

While not explicitly predicted, the negative relation between narcissism and low agency/high communion behaviour fits with the conception of narcissism reflecting dominance-based status: group members who have been forced to submit

to higher status members may be careful not to challenge or upset their intimidators. Thus, they may avoid dominant and quarrelsome behaviour that might be construed as a challenge.

In contrast, the negative relation between self-esteem and low agency/low communion behaviour fits with the conception of self-esteem reflecting prestige-based status: before voluntarily granting status to those they deem worthy, low status group members may critically evaluate alternative group members (Price, 2000). Moreover, they may use unfriendly tactics to keep overly ambitious high status figures in check (Dentan, 1979; Henrich & Gil-White, 2001). Thus, while their behaviour may not be dominant, it need not necessarily be friendly.

In addition, partialling for narcissism slightly reduced the correlation between self-esteem and high agency/high communion responses, whereas partialling for self-esteem strengthened the positive correlation between narcissism and high agency/low communion behaviour. Thus, in contrast with Study 4.1, controlling for contamination effects did not increase the hypothesized relations between self-esteem and behaviour, whereas it did somewhat increase those between narcissism and behaviour.

One reason for these contrasting findings may be the measures of self-esteem used in Study 4.1 and Study 4.2. Different measures of self-esteem are associated with slightly different interpersonal content (Zeigler-Hill, 2010). Therefore, some may tap into narcissism to a greater extent than others. Possibly, compared to the SLCS-R, the RSES is a relatively “narcissism-free” measure of self-esteem: when partialling for narcissism the hypothesized relation between the RSES and high agency/high communion behaviour did not improve (and even decreased) in Study

4.2, whereas partialling for narcissism had a substantial effect on the hypothesized correlation between the SLCS-R and communal behaviour in Study 4.1.

Overall, Study 4.1 and 4.2 provide convergent support for the hypotheses at the trait level. They do so using different measures of self-esteem and narcissism, and markedly different operationalizations of interpersonal behaviour. Moreover, the results remain strong in Study 4.2 despite the substantial time-lag between the collection of the self-regard data and the collection of the behavioural strategies data, suggesting the results are not only strong but also stable.

Study 4.3: Self-Regard and Recalled Behaviour

Study 4.3 aimed to provide further converging support for the hypotheses. More importantly, it aimed to demonstrate that the hypothesized relations with interpersonal behaviour are *unique* to self-esteem and narcissism. Given that both self-esteem and narcissism covary with many traits (see e.g., Campbell et al., 2002), their relations with interpersonal behaviour may be the result of such covariates rather than of a unique relation with self-esteem or narcissism. However, if the same relations were found at the state level – in other words if state fluctuations in people’s interpersonal behaviour were to *covary* with their state levels of self-esteem and narcissism – this would arguably imply that these relations were unique to self-esteem and narcissism. Moreover, such a method would offer methodological advantages over the alternative method of controlling for any covariates of self-esteem and narcissism that theoretically might mediate these relations, as creating an exhaustive list of such possible covariates would be difficult. The chosen method, in contrast, has the advantage of being methodologically succinct.

To assess whether people's interpersonal behaviour covaries with their state levels of self-esteem and narcissism, I wanted to compare participants' behaviour in situations in which they experienced high self-esteem with their behaviour in situations in which they experienced low levels of self-esteem, and to do the same for situations in which they experienced high versus low levels of narcissism. As, to my knowledge, no earlier work had attempted to manipulate self-esteem and narcissism in parallel, I was obliged to create a new manipulation. I decided to use a recall task to elicit each of the four conditions. There were several reasons for this choice.

Firstly, as mentioned before, self-esteem and narcissism are related constructs that are moderately correlated. Thus, any manipulation of self-esteem is bound to have some effect on narcissism as well and vice versa. To minimize such crossover effects, I needed a task in which I could include enough specific instructions to carefully tease apart the two constructs.

Secondly, narcissism is in itself a complex construct with many different factors (Emmons, 1984, 1987; Raskin & Terry, 1988). Therefore, I also needed a task in which I could include enough specific instructions to capture this complexity.

Third, a review of the literature revealed many examples of self-esteem manipulations, but hardly any examples of narcissism manipulations. However, some earlier work that has successfully manipulated narcissism made use of a recall task (Sakellaropoulo & Baldwin, 2007). Given the relative novelty of manipulating narcissism, and the added complexity of manipulating self-esteem in parallel, I decided to build on this existing task, rather than attempt a completely new approach.

Participants

University students ($n = 112$) took part in a 2 (level of self-regard: high/low) x 2 (type of self-regard: self-esteem/narcissism) within-subject lab experiment in

return for course credit or a monetary reward. A check on student IDs revealed that two participants had each taken part twice. Both students' second set of data was removed, leaving 110 participants (23 male, 86 female, 1 unreported) ranging in age from 18 to 41 ($M = 21.16$, $SD = 4.20$).

Procedure

Participants were asked to report their interpersonal behaviour in four situations that were presented in a randomized order. They received a set of specific instructions for each of these situations. These instructions were designed to a) carefully distinguish between self-esteem and narcissism, and b) capture the complexity of the narcissism construct. Additionally, in order to reduce demand effects, overlap in the wording of the instruction and the manipulation checks of state self-esteem and narcissism was minimized (the complete manipulations are included in Appendix 4.2, the measures of state self-esteem and narcissism in Appendix 4.3 and 4.4).

For example, to carefully distinguish the high self-esteem condition from the high narcissism condition, participants in the high self-esteem condition were asked to describe a time when they “felt comfortable with themselves and secure in their self-worth” in order to elicit a memory of being worthy (i.e., *meeting* a standard). In contrast, participants in the high narcissism condition were asked to describe a time when they “stood out from the crowd and were admired by others” in order to elicit a memory of feeling glorious (i.e., *exceeding* a standard). Similarly, participants in the low narcissism condition were asked to describe a time when they “felt no better or worse than most people” (i.e., they did *not exceed* a standard), whereas participants in the low self-esteem condition were asked to describe a time when they “felt like a failure” (i.e., they did *not meet* a standard).

To capture the complexity of the narcissism construct the instructions reflected different factors of the narcissism construct (see e.g. Raskin & Terry, 1988). For example, in the high narcissism condition they were asked to describe how they “looked and felt” (vanity, exhibitionism), and how the event made them feel “successful” (authority, self-sufficiency), “entitled to the attention of others” (entitlement, exhibitionism), and “special” (superiority). To make sure that participants clearly recalled the situation and remembered it in all its complexity, they were urged to “take a couple of minutes to vividly recall the experience” and to “re-live the moment in your mind”, before describing the event and answering questions about it.

Measures

Following each recall task, participants reported their self-esteem, narcissism, and behaviour in the recalled situation on brief state-level measures (see Table 4.7 for descriptive statistics). Up to 7 months prior to the lab session a subset of the participants ($n = 58$) also completed trait versions of the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) and the 40-item Narcissistic Personality Inventory (NPI-40; Raskin & Terry, 1988) as part of a series of measures routinely completed by new students.

Self-esteem. To create a short measure of state self-esteem, I selected items from the Rosenberg Self-Esteem Scale and reworded them to reflect states rather than traits (Rosenberg, 1965; see Appendix 4.3). To maximize the relevance of the selected items for the self-esteem–status link under investigation, I selected only positively worded items as some research suggests such items reflect self-confidence whereas negative items reflect self-(dis)liking (see Gray-Little, Williams, & Hancock, 1997 for a review). Moreover, negatively worded items have been found to

be more strongly confounded with measures of depression (Greenberger, Chen, Dimitrieva, & Farruggia, 2003). From the positive items I selected the two items that best reflect the underlying trait as indicated by their factor loadings and item discrimination scores (Gray-Little et al, 1997). Participants rated these items from *strongly disagree* (1) to *strongly agree* (7) and scores were averaged to create a composite score.

Narcissism. Participants completed a state version of items selected from the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988; see Appendix 4.4). Two items were selected from each subscales identified by Raskin and Terry (1988) to limit the length of the narcissism measure, without compromising its breadth. I selected items that loaded most strongly on the different factors, except when such items were unsuitable to be worded in terms of a state (e.g., items reflecting “when ... then...” statements). All selected items were among the three strongest loading items in the original subscale, and all had a minimum factor loading of .5.

Interpersonal Behaviour. Interpersonal behaviour was assessed with the original state version of the SBI (Moskowitz, 1994). To increase brevity without compromising content, participants indicated whether they engaged in each of the 46 behaviours on the scale in a simple *yes* (1) / *no* (0) format. The scores were reverse-scored where appropriate and averaged to create composite scores for respectively agentic and communal behaviour.

Results and Discussion

Success of manipulations. To determine whether participants' level of state self-esteem differed across conditions, I conducted a 2 (level of self-regard) x 2 (type of self-regard) ANOVA on self-esteem. There was a main effects of the type of self-regard, $F(1,105) = 352.34, p < .001, \eta^2 = .77$, and level of self-regard manipulated,

$F(1,105) = 704.34, p < .001, \eta^2 = .87$ on participants' state self-esteem. Moreover, there was a significant interaction effect between the level and type of self-regard manipulated, $F(1,105) = 360.50, p < .001, \eta^2 = .77$, suggesting that the self-esteem manipulation (i.e., high versus low self-esteem) and the narcissism manipulation (i.e., high versus low narcissism) each had a significantly different effect on state self-esteem. Simple effects analysis revealed that, as intended, self-esteem was higher in the high self-esteem condition than in the low self-esteem condition, $F(1,105) = 967.83, p < .001, \eta^2 = .90$. Self-esteem was also higher in the high narcissism condition than in the low narcissism condition, $F(1,105) = 43.60, p < .001, \eta^2 = .29$, which is not surprising given that self-esteem and narcissism are moderately correlated (Brown & Zeigler-Hill, 2004). However, the latter effect was considerably smaller than the prior effect. Thus, state self-esteem was more strongly affected by the self-esteem manipulation than by the narcissism manipulation.

Subjecting narcissism to the same level of self-regard x type of self-regard ANOVA revealed significant main effects of the type of self-regard, $F(1,70) = 5.46, p = .022, \eta^2 = .07$, and level of self-regard manipulated, $F(1,70) = 113.12, p < .001, \eta^2 = .62$ on state narcissism, as well as a significant interaction effect between the level and type of self-regard manipulated, $F(1,70) = 4.06, p = .048, \eta^2 = .06$. Simple effects analysis revealed that, as intended, narcissism was higher in the high narcissism condition than in the low narcissism condition, $F(1,70) = 82.30, p < .001, \eta^2 = .54$. Again there was a smaller cross-over effect so that narcissism was also higher in the high self-esteem condition than in the low self-esteem condition, $F(1,70) = 47.12, p < .001, \eta^2 = .40$. Thus, the effect of the narcissism manipulation on state narcissism was stronger than that of the self-esteem manipulation. Thus,

overall, each manipulation had a significantly greater impact on the variable it was meant to manipulate than on the variable it was not meant to manipulate.

As a secondary check, I assessed the effectiveness of each of the recall tasks independently. To do so, I compared the levels of state self-esteem and narcissism reported by participants in different conditions with the trait levels of self-esteem and narcissism they reported up to seven months earlier. Given the time lag between the measurement of the trait-level and the state-level scores, these comparisons must be interpreted with caution. The trait scores of participants may have randomly changed in the interim, and as a result the effect of any condition may be underestimated or overestimated in this test. That said, *t*-tests revealed a significant effect in the intended direction in three of the four conditions. Thus, there is good evidence that most individual conditions had the intended effect. Relative to their trait level of self-esteem, participants reported increased levels of state self-esteem in the high self-esteem condition, $t(56) = 6.05, p < .001$, and reduced levels of self-esteem in the low self-esteem condition, $t(55) = -19.02, p < .001$. Moreover, relative to their trait level of narcissism, participants reported reduced levels of narcissism in the low narcissism condition, $t(43) = -5.33, p < .001$. However, in the high narcissism condition participants levels of situational narcissism did not differ from their trait level of narcissism, $t(42) = 1.50, p = .142$. Again, there were also some cross-over effects. Participants reported decreased narcissism in the low self-esteem condition, $t(46) = 6.15, p < .001$, and increased self-esteem in the high narcissism condition, $t(56) = 6.13, p < .001$. Other cross-over effects were not significant ($ps \geq .224$).

In summary, these checks confirmed that the manipulations generally worked as intended. Importantly, the primary checks confirmed that the manipulations worked relative to one another. Moreover, the secondary check produced results that

were also generally consistent with the manipulations working. Therefore, I have reasonable confidence that the manipulations successfully manipulated participants' state levels of self-esteem and narcissism.

Agentic behaviour. A 2 (level of self-regard) x 2 (type of self-regard) ANOVA on the agentic behaviour composite score revealed a significant interaction between level and type of self-regard, $F(1,89) = 4.52, p = .036, \eta^2 = .05$, as well a main effect of level of self-regard, $F(1,89) = 82.21, p < .001, \eta^2 = .48$. Importantly, simple effects analysis revealed that, as predicted, the level of agentic behaviour participants recalled was both higher in the high self-esteem condition than in the low self-esteem condition, $F(1,89) = 65.26, p < .001, \eta^2 = .42$, and higher in the high narcissism condition than in the low narcissism condition, $F(1,89) = 27.78, p < .001, \eta^2 = .24$.

Communal behaviour. A 2 (level of self-regard) x 2 (type of self-regard) ANOVA on the communal behaviour composite scores revealed a significant interaction effect between level and type of self-regard, $F(1,84) = 86.57, p < .001, \eta^2 = .51$, as well as main effects of type of self-regard, $F(1,84) = 120.64, p < .001, \eta^2 = .59$, and level of self-regard, $F(1,84) = 61.81, p < .001, \eta^2 = .42$. Importantly, simple effects analysis revealed that, as predicted, the level of communal behaviour participants recalled was *higher* in the high self-esteem condition than in the low self-esteem condition, $F(1,84) = 111.66, p < .001, \eta^2 = .57$, and *lower* in the high narcissism condition than in the low narcissism condition, $F(1,84) = -4.33, p = .041, \eta^2 = .05$.

Summary. Study 4.3 supported the hypotheses at the state level. Compared situations in which their state narcissism was low, participants recalled more agentic behaviour and less communal behaviour when their state narcissism was high.

Moreover, compared situations in which their state self-esteem was low, participants recalled both more agentic behaviour and more communal behaviour when their state self-esteem was high.

General Discussion

How does the self-appraisal of people who behave in ways liable to assist them in grabbing status differ from the self-appraisal of people who behave in ways liable to convince others to grant them status? The research reported in this chapter provides a clear answer to this question. Across three studies, self-esteem was consistently associated with behaviours that were high in agency as well as communion, whereas narcissism was consistently associated with behaviours that were high in agency and low in communion, behaviours that have been found to be associated with status in, respectively, prestige-based hierarchies where status is grabbed, and dominance-based hierarchies where status is granted (see Chapter 3).

The first two studies provided strong support for the hypotheses at the trait level across different measures of self-esteem and narcissism, and using markedly different operationalizations of interpersonal behaviour. The second study also found that these results were stable over time: the hypotheses were supported despite a substantial time lag between the collection of the self-regard data and the collection of the behavioural data. The third study, finally, supported the hypotheses at the state level. In other words, state fluctuations in people's interpersonal behaviour were found to covary with their state levels of self-esteem and narcissism, arguably implying that the hypothesized relations were not only strong and stable, but also unique to self-esteem and narcissism.

One possible limitation of these studies is that they relied on self-report to assess interpersonal behaviour. This renders them susceptible to a self-enhancement bias that may have led some participants to over-report socially desirable high agency and high communion behaviours. This is potentially problematic since people with higher levels of narcissism and self-esteem may be more inclined to exhibit such a bias (Kwan, John, Kenny, Bond, & Robins, 2004; John & Robins, 1994). By including more objective measures of interpersonal behaviour, future studies may build on and expand the current findings.

All three studies assessed trait-level covariations between self-regard and status-promoting behaviours, either at the trait or at the state level. Consequently, it is not possible to determine the causal direction of the relations between self-regard and behaviour from the results. However, three possibilities are worth noting.

The first possibility is that status-promoting behaviour makes people feel good about themselves because it promotes status. In other words, status-promoting behaviours lead to increased status (as Chapter 3 revealed, this need not always be the case), which in turn leads to positive self-regard. Thus, rather than there necessarily being a direct relation between self-regard and behaviour, this relation may be mediated by status. If this possibility is correct, both self-esteem and narcissism act as what Leary and colleagues (Leary & Baumeister, 2000; Leary & Downs, 1995) have referred to as a “sociometer”: they track the “social value” of an individual.

A second possibility, and one that is consistent with the argumentation at the start of this chapter, is that people who feel good about themselves engage in status-promoting behaviours because they feel confident that they can succeed in doing so (Gilbert et al, 1995). More specifically, high self-regard motivates people to behave

in ways that promote status, whereas low self-regard motivates people to avoid (the risks associated with) such behaviours when they are unlikely to be successful. If this possibility is correct, and building on Leary and colleagues' (Leary & Baumeister, 2000; Leary & Downs, 1995) terminology, self-regard may be referred to as a "sociomotivator": an internal device that regulates status-striving.

Finally, combining these first two possibilities, gives a third possibility: that self-regard reacts to clues of social value and, when high, motivates people to behave in ways that promote status. In other words, status leads to self-regard which in turn leads to status-promoting behaviours. Stated differently, self-regard acts as both a sociometer *and* as a sociomotivator.

Why discuss this causal sequence if the research presented does not assess it directly? There are several good reasons to do so. Firstly, this causal sequence speaks to a strand of research arguing that self-regard is an evolved psychological mechanism that helps people navigate their social world (Hill & Buss, 2006; Kirkpatrick & Ellis, 2001, 2006; Leary & Baumeister, 2000; Leary & Downs, 1995). More specifically, self-regard is asserted to help people maintain a certain level of social value. Quite similar to the way hunger alerts people to their need to acquire and ingest food, and motivates them to do so, low self-regard may alert people to the need to yield to superior competitors, and motivate them to do so. Together a sociometer and a sociomotivator may do just that.

Secondly, although the research presented here does not critically test this causal sequence, the results are consistent with elements of it. In particular, the results provide support for a possible sociomotivator function of self-regard. As such, they complement the overwhelming support that has already been obtained for a sociometer function of self-regard (for a review see e.g., Leary & McDonald, 2003).

A third and final reason to consider the causal nature of the relations between status, self-regard and interpersonal behaviour, is its importance for understanding the possible vices and virtues of narcissism. Narcissism and self-esteem are portrayed very differently in the literature. Self-esteem is generally perceived to be “healthy”, whereas narcissism is generally seen as “unhealthy” (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004). However, the causal sequence discussed here implies that both may be “functional” in their own way: self-esteem impels people to convince other to grant them status, whereas narcissism motivates them to grab it. Aggressive leaders, who grab status, may be welcomed in times of crisis (Schlessinger, 1986), possibly because their ability to wield greater power is welcomed as a means to decisively deal with threats. Thus, in the right time and place, narcissism may prove highly effective. However, a confirmation of their ability to seize power may further boost the narcissism of such leaders, and contribute to the self-reinforcing cycle of status (Magee & Galinsky, 2008). If we require people to assertively take control, we might need to accept that we will end up with narcissistic leaders.

CHAPTER 5

Interpersonal Warmth towards High-Status Individuals in Dominance and Prestige Hierarchies

Status is not equally distributed among members of a group (Berger et al., 1985). In previous chapters I have empirically established that attaining high status is associated with certain behaviours, and that some people are more inclined to engage in such behaviours than others. However, there may be another reason that some people attain higher status in a group than others: like anything of value attaining status may entail some costs, and not everyone may be willing to pay the necessary price to attain status. Thus, the question arises what *costs* people may incur when attaining status. As status attainment is an inherently social process, I answer this question here by assessing the interpersonal consequences of status, focusing in particular on how status affect the level of *interpersonal warmth* people receive from others.

Comparing unfavourably to another person can make people feel bad (Tesser, 1988). Therefore, people who attain high status can evoke negative feelings in others who compare unfavourably to them. Those others may feel envious and even harbour malicious feelings towards the high-status person (Van de Ven, Zeelenberg, & Pieters, 2009) which would impede their seeking a kind and caring relationship with this person. Consequently, people may need to forego interpersonal warmth in order to gain status. This would qualify as an important interpersonal sacrifice, given people's strong need to be part of on-going relationships marked by caring and concern (Baumeister & Leary, 1995).

Status and Interpersonal Warmth

Prior research paints an inconsistent picture of the interpersonal warmth group members feel towards people with high status (cf. Lee & Tiedens, 2001). Relative to low-status people, higher-status people tend to be both prominent in interactions (Berkowitz, 1956; Leavitt, 1951; Shaw, 1964; but Cook, Emerson, Gilmore, & Yamagishi, 1983) and socially well-connected (Brass, 1984; Ibarra & Andrews, 1993; Lincoln & Miller, 1979). They also stand out (Chance, 1967; Ellyson, Dovidio, Corson, & Vinicur, 1980; Maner, DeWall, & Gailliot, 2008) and receive more attention (Berger et al., 1972; Ellyson et al., 1980). Thus, evidently, higher-status people are neither alone nor ignored. Accordingly, there is little support for the folk wisdom that “it’s lonely at the top”. But are higher-status people genuinely liked and included by other people? Or might they be highly regarded but yet unloved? Might it be false that “everybody loves a winner”?

Given that kindness and liking tend to be reciprocated (Byrne & Rhamey, 1965; Sadler & Woody, 2003), one clue may lie in how high-status people treat others. However, how they treat others is itself not clear. On the one hand, some research finds that high-status people are sensitive to others (Schmid Mast et al., 2009), and are keen to seek additional information about them (Chen, Ybarra, & Kiefer, 2004). It also finds that they are better than low-status people at reading the emotions of interaction partners (Schmid Mast et al., 2009) and at remembering, recalling, and interpreting individuating information (Overbeck & Park, 2001). On the other hand, opposing research finds that high-status people are less likely to consider another person’s perspective (Galinsky et al., 2006), more likely to base their opinion of others on broader stereotypes (Goodwin, Gubin, Fiske, & Yzerbyt, 2000). It also finds that they are prone to viewing many of their relationships as

means to an end rather than as ends in themselves (Gruenfeld, Inesi, Magee, & Galinsky, 2008; Keltner, Gruenfeld, & Anderson, 2003; Kipnis, 1972).

One reason for such mixed findings may be that status can be attained in contrasting ways. Whereas some may promote interpersonal warmth, others may impede it. Here, I propose that the extent to which people with high status are liked and included by other people depends importantly on the *interpersonal processes* underlying their group's hierarchy.

Dominance and Prestige Hierarchies

I draw a distinction between *dominance-based hierarchies*—in which status is aggressively grabbed by few group members —and *prestige-based hierarchies*—in which status is freely granted by many group-members (see Chapter 2 of this thesis).¹ This fundamental distinction has been noted by scholars across a range of disciplines (e.g., anthropology: Henrich & Gil-White, 2001; evolutionary psychology: Buttermore & Kirkpatrick, 2009; Cheng et al., 2010a; sociology: Kemper, 1994; social psychology: Anderson & Kilduff, 2009b). Real-life examples of the two hierarchy types are legion. Hierarchies based primarily on dominance-processes include dictatorships, street gangs, and teams led by autocratic bosses. Hierarchies based primarily on prestige-processes include democracies, common interest groups, and teams who elect their own leader.

My hypothesis is this: that the extent to which a group is, or is perceived to be, relatively dominance-based, as opposed to relatively prestige-based, will moderate how favourably people at or towards the top of a group hierarchy are regarded. In particular, *status in relatively prestige-based hierarchies, being rooted in popularity, will elicit greater interpersonal warmth from others, whereas status in more dominance-based hierarchies, being rooted in coercion, will elicit less*

interpersonal warmth from others. Thus, I postulate that is not so much status per se that determines attitudes towards high status individuals, but rather the *manner* in which that status has been achieved in the group. Consequently, the interpersonal costs or benefits associated with status attainment should differ diametrically depending on the interpersonal process underlying a status hierarchy.

Why might interpersonal warmth towards people with high status differ in dominance and prestige hierarchies? As outlined in Chapter 3, status in prestige-based hierarchies is attained with behaviour that is both high in agency and high in communion. Thus, people who attain status do so by behaving forcefully and *kindly*. In dominance-based hierarchies, on the other hand, status is attained with behaviour that is high in agency and low in communion. Thus, people who attain status do so by behaving forcefully and *unkindly*. As friendly behaviour evokes interpersonal warmth (Byrne & Rhamey, 1965; Sadler & Woody, 2003), I expected that would be the case for high-status members of prestige-based hierarchies, but not for high-status members of dominance-based hierarchies.

Overview of Studies

I tested this hypothesis in two studies that used different methods with complementary strengths.

In Study 5.1, I had participants read a vignette describing a student association that was either dominance-based or prestige-based and one describing a student-member who had either high or low status in the association. Participants then rated their perception of other members' interpersonal warmth towards the student-member of the group. This allowed me to assess in a controlled experiment the independent effects of status and hierarchy type on perceived interpersonal warmth, as well as their interactions.

It is important to note that participants rated their *perception* of the interpersonal warmth experienced towards a person described to them in a vignette, rather than their *actual* interpersonal warmth towards a person with whom they interacted directly. Like in earlier studies using vignettes (e.g. Study 2.1), this required participants to imagine what it would be like to be a member of the group in order to rate their interpersonal warmth. However, like in those earlier studies, to facilitate this process the context in which the vignette was situated (a student association) was chosen to be highly familiar to participants (University students).

In Study 5.2, I investigated naturally occurring groups, using sociometric methods in which group members all rated one another. In this way, I assessed individual levels of status, individual levels of perceived interpersonal warmth, and overall type of group hierarchy (based on collective ratings). Importantly, members of these groups studied actually interacted with one another, actually possessed different statuses, actually experienced the consequences of this, and actually exhibited interpersonal warmth towards fellow group members. The design of Study 5.2 thus allowed me to evaluate the real-world validity of the dominance-prestige distinction, and to explore the relevance of the distinction for predicting levels of interpersonal warmth. Furthermore, the design permitted me to study attitudes, not only of people *at* the top of a hierarchy (i.e., nominal leaders), but towards people *towards* the top of a hierarchy (i.e., prominent persons), affording the opportunity for a more fine-grained, general analysis.

Study 5.1: Hierarchy Type, Perceived Status, and Interpersonal Warmth

Participants and Procedure

Undergraduate students ($N = 75$; 28 males, 46 females, 1 unreported) from Tilburg University participated in a 2 (Hierarchy Type: dominance-based processes, prestige-based) x 2 (Status Level: low, high) between-subject vignette study. The participants ranged in age from 18 to 36 ($M = 21.20$, $SD = 2.75$).

Participants first read one of two vignettes describing a fictitious student association named “Mandante” (see Appendix 5.1). In the dominance-based hierarchy condition, Mandante was described as a place where “powerful members will exert pressure on others until they give in” whereas in the prestige-based hierarchy condition it was described as a place where “members will back the people that they sincerely appreciate and respect”.

Participants then read a description of a student named “Kim” (a gender-neutral name in Dutch), who was either described as having high status or low status within Mandante (see Appendix 5.2). In the low status condition Kim was described as “someone who is unnoticeably present” and “exerts little influence” within Mandante. In the high status condition Kim was described as “someone who is prominently present” and “exerts a lot of influence” within Mandante.

After reading the vignette, participants completed the measures below.

Measures

Participants rated Kim’s status within Mandante (*high status* and *little standing*, reverse-scored) on a 7-point scale (1 = *Not at All*, 7 = *Very Much*).¹ The two items were averaged to form a composite score of status ($M = 4.02$, $SD = 2.01$, $r(74) = .72$).

The perceived hierarchy type of Mandante was measured with four items. Of these, two ($M = 4.42$, $SD = 1.62$, $r(74) = .54$) assessed how much status in Mandante was based on dominance (*status is assertively taken by people who have the ability or means to do so and people with lower status go along with those with high status because they fear repercussions.*). Another two ($M = 3.82$, $SD = 1.67$, $r(74) = .49$) assessed how much status in Mandante was based on prestige (*status is willingly given to people by others who value them, and people with lower status go along with those with high status out of genuine respect*). Again, participants rated each item on a 7-point scale (1 = *Not at All*, 7 = *Very Much*).

Perceived interpersonal warmth was assessed with two items: “*Within Mandante Kim is someone with whom others have a warm bond*” and “*Within Mandante Kim is someone who is not genuinely liked*” (reversed-scored). The two items were averaged to create a composite index of interpersonal warmth ($M = 3.91$, $SD = 1.11$, $r(74) = .42$).

Results

Manipulation checks. A 2 (Hierarchy Type: dominance-based, prestige-based) x 2 (Status Level: low, high) ANOVA on the two hierarchy type measures, suggested that the hierarchy type manipulation was successful.

On the dominance-based hierarchy measure, the ANOVA yielded a main effect, $F(1, 69) = 76.64$, $p < .001$, $\eta = .53$, such that the hierarchy of Mandante was rated as more dominance-based in the dominance-based condition ($M = 5.68$, $SD = .98$) than in the prestige-based condition ($M = 3.33$, $SD = 1.24$). No other effects were significant.

Moreover, on the prestige-based hierarchy measure, the ANOVA yielded a main effect, $F(1, 69) = 24.13$, $p < .001$, $\eta = .26$, such that the hierarchy of Mandante

was rated as more prestige-based in the prestige-based condition ($M = 4.60$, $SD = 1.24$) than in the dominance-based condition ($M = 2.91$, $SD = 1.66$). Again, no other effects were significant.

A Hierarchy Type x Status ANOVA on the status measure revealed a main effect of status condition, $F(1, 69) = 196.29$, $p < .001$, $\eta = .74$, such that Kim's status was rated higher in the High Status ($M = 5.76$, $SD = .85$) than in the Low Status ($M = 2.37$, $SD = 1.23$) condition. Thus, the manipulation had the expected effect. There was also an unexpected, but smaller main effect of the hierarchy type manipulation, $F(1, 69) = 4.12$, $p < .046$, $\eta = .06$, such that status was higher in the prestige-based condition ($M = 4.26$, $SD = 1.94$) than in the dominance-based condition ($M = 3.69$, $SD = 2.07$). No other effects were significant.

Interpersonal warmth. Running the same ANOVA with interpersonal warmth as the dependent variable yielded the expected interaction between hierarchy type and status, $F(1, 69) = 13.31$, $p = .001$, $\eta = .16$. As illustrated in Figure 5.1, the nature of this interaction matched the predictions: status reduced interpersonal warmth in the dominance-based condition and increased it in the prestige-based condition, $F(1,70) = 5.61$, $p = .021$, $\eta^2 = .07$. Moreover, simple effects analyses revealed that these effects were significant in both the dominance-based condition, $F(1,70) = 7.87$, $p = .007$, $\eta^2 = .10$, and in the prestige-based condition, $F(1,70) = 5.61$, $p = .021$, $\eta^2 = .07$.

Simple effects analyses also revealed that interpersonal warmth differed across hierarchy type in the high status condition, $F(1,70) = 19.93$, $p < .001$, $\eta^2 = .22$, but not in the low status condition, $F(1,70) = .42$, $p = .521$, $\eta^2 < .01$. In other words, people with high status are liked more when they have this status in a prestige-hierarchy ($M = 4.66$, $SD = 1.20$) than in a dominance-hierarchy ($M = 3.24$, $SD = .94$),

but people with low status are equally liked in the two types of hierarchies (respectively $M = 3.80$, $SD = .59$ and $M = 4.00$, $SD = 1.00$).

Discussion

As predicted, Study 5.1 revealed that perceived status increased perceived interpersonal warmth when a group was described as a prestige-based hierarchy, but reduced it when the group was described as a dominance-based hierarchy. Thus, whether people with high status are perceived to be interpersonally warm depends on the type of process underlying their group's hierarchy. In line with the hypothesis, I found that "everybody loves a winner" in prestige-based hierarchies, but that it is "lonely at the top" in dominance-based hierarchies.

Study 5. 2: Hierarchy Type, Status Level, and Interpersonal Warmth in Naturally Occurring Groups

In Study 5.2, I again tested whether group hierarchy type moderated the link between status and interpersonal warmth. This time, however, I did so in several pre-existing classes of college students in the UK. In effect, Study 5.2 aimed to replicate the results of Study 5.1 in a real-life setting. However, Study 5.2 also went beyond Study 5.1 in several ways.

First, I assessed both the perceived status of students in each class, and the interpersonal warmth shown towards them. Thus, I was able to measure, not only group-level variations in interpersonal warmth shown towards the highest status members, but also individual-level variations in interpersonal warmth shown towards members of varying different status within each group.

Second, Study 5.2 employed a sociometric round-robin design such that, on the key dimensions of status and interpersonal warmth, each rater evaluated different targets, and each target was in turn evaluated by different raters, within each of the

several classes. Accordingly, I could obtain highly reliable and objective measures of each target on these dimensions.²

Third, face-to-face status inherently reflects the perspective of group members, and hence is best measured through peer ratings (Anderson et al., 2001). Furthermore, the same is true for interpersonal warmth, being defined as the extent to which other group members genuinely like and include a person.

Finally, I am, to my knowledge, the first to test naturally occurring variances in the extent to which face-to-face human groups vary in terms of being dominance-based or prestige-based. True, the relevant variation in college classes in Western culture is unlikely to be representative of that across human groups generally, and probably substantially underestimates it. If so, however, and if relevant variation in these rather homogeneous and civilized groups were still to predict how warmly high-status individuals are perceived, then that would argue for the validity and importance of the distinction between dominance-based or prestige-based processes in more heterogeneous and contentious groups.

Participants and Procedure

College students of psychology ($N = 182$, in 10 classes of 8-25 students) participated in a round-robin study with repeated measures (two sessions).³ Seven participants were removed either because they (a) failed to complete more than one-fifth of their measures, (b) were not rated by more than one-fifth of their fellow students, or (c) failed to complete more than one-tenth of their measures *and* were not rated by more than one-tenth of their fellow students. Five more participants were removed after an outlier analysis indicated that the test-retest reliability of the ratings departed significantly from normal expectation. The remaining 170 participants included 13 students (7.6%) who were absent at the first session, and 27

(15.9%) who were absent at the second session. Given the scores provided by participants present during only one session did not differ significantly from those provided by those present during both sessions, all scores were included in subsequent analyses to maximize power.⁴

Demographic data was gathered only during the first session. Students therein ranged in age from 16 to 28 ($M = 16.95$, $SD = 1.26$), were mostly female (75.2%), and white (89.2%). The teachers of the classes ranged in age from 27 to 42 ($M = 36.00$, $SD = 6.38$); two were male, two female, and all white.

After providing demographic data, participants rated all the students in their class on single-item measures of both status and interpersonal warmth in a round-robin design. Next, they completed a class-level measure of hierarchy type. In order to assess their test-retest reliability, all these measures were repeated in the second session, which took place two weeks later.

Measures

Participants rated their own status level, and that of every other student in their class, from *Not at All* (1) to *Very Much* (7) on a single item (*Thinking about each person in your class in turn, indicate how prominent [i.e. visible, attracts attention] and influential you feel they are in your class*).

Two bipolar items assessed the hierarchy type of the class. Each ran from a prestige pole to a dominance pole. (I did this as in Study 2.1 I found that dominance-based and prestige-based processes were inversely correlated, lying at opposite ends of a continuum.) The first item ran from “*status is willingly given to people by others who value them*” to “*status is assertively taken by people who have the ability or means to do so*”. The second item ran from “*people with lower status go along with those with high status out of genuine respect*” to “*people with lower status go along*

with those with high status because they fear repercussions". Each item was rated on a 6-point scale, with higher scores indicating that the status hierarchy of the class was based more strongly on dominance than on prestige.

Finally, interpersonal warmth was rated from *Not at All* (1) to *Very Much* (7) on a single item (*Thinking about each person in your class in turn, indicate how liked and included you feel they are in your class*). Again, each participant rated each student in their class, including themselves.

Results

The analysis of the data was designed to take into account both the sociometric nature of the round-robin data as well as the hierarchical nesting of the participants in classes. To do so, I first calculated composite peer ratings from the sociometric data using Kenny and La Voie's (1984) social relations model and the associated *SOREMO* software (Kenny, 1994). To take into account the nesting of data within classes, I tested my hypothesis with the mixed models option in SPSS and included class as a random effect in the model. Given the complexity of these analyses, I maximized the data available to perform them by merging participant scores across the two data collection sessions, including all participants who had taken part in at least one of the two.

Data preparation. Hierarchy type, status level, and interpersonal warmth, were each assessed twice. To assess the temporal stability of the hierarchy type measure, I first created a composite by averaging the two items ($\alpha = .58$). I then calculated the correlation between the ratings of this composite during the first and the second session ($r = .69$). To assess the temporal stability of the two round-robin measures (status and interpersonal warmth) I took a slightly different approach. I first calculated, for each participant, the correlation between their ratings of the same

targets across the first and second sessions. Next, I applied a Fisher r to z' transformation to normalize the resulting values, averaged those values across participants, and finally back-transformed that average. Both status ($r = .79$) and interpersonal warmth ($r = .77$) emerged as highly correlated across sessions.

Having found adequate test-retest reliability, I merged the data across the two data collection sessions for status ($M = 4.29$, $SD = .57$), hierarchy type ($M = 2.74$, $SD = .93$), and interpersonal warmth ($M = 5.18$, $SD = .67$). I averaged scores across sessions for participants who had taken part in both sessions, and using either single score for participants who had taken part in either the first or second session.

Between-class differences along the dominance–prestige dimension. A one-way ANOVA revealed that hierarchy type varied significant across classes, $F(9, 160) = 2.43$, $p = .01$). Thus, even the relatively homogeneous groups I studied differed in the extent to which their hierarchies were relatively prestige-based or relatively dominance-based.

Given that the hierarchy type of the classes differed, I calculated a class-level score of hierarchy type by averaging the ratings per class. Inspection of these class means revealed that none of the classes in the sample reflected a dominance hierarchy in the absolute sense: all scores lay below the scale midpoint. This is unsurprising, given that prestige-based hierarchies are prevalent in human society in general (Henrich & Gil-White, 2001; Van Vugt, Hogan, et al., 2008), and that psychology classes in contemporary liberal society are unlikely to contain either fiercely competitive students or autocratic teachers.

SOREMO analysis. I computed composite peer ratings of status and interpersonal warmth in line with Kenny and La Voie's (1984) social relations model, and using the associated software *SOREMO* to analyse it (Kenny, 1995).

SOREMO separates target scores (i.e., how a student is typically perceived by other students in their class), perceiver scores (i.e., how each student typically view of others in their class), and relationship effect scores (how people in each dyadic relationship idiosyncratically perceive one other), making them suitable for analyses that assume independence. Before running the program, I filled in omitted ratings, as SOREMO requires a dataset without missing data. For missing data on round-robin measures, I inserted the average ratings provided by other students to a given participant. For missing data at class level, I inserted the class average.

Before analysing the target scores calculated by SOREMO, I conducted two preliminary tests to assess their quality. First, I consulted the relative target variance calculated by SOREMO. Relative target variance reflects the extent to which the total variance in peer ratings reflects differences in ratings given to different targets relative to differences in ratings given by different raters, and as such is used as an index of consensus in peer ratings (cf. Anderson & Kilduff, 2009b). Significant relative target variances revealed above-chance agreement among group members on the relative status (relative variance = .36) and interpersonal warmth (relative variance = .23) of different members of their class. Second, to further ensure within-class agreement on target scores, I checked whether they adequately corresponded to participants' self-ratings. As expected, perceiver scores were highly correlated with self-ratings for both status ($r = .61$) and interpersonal warmth ($r = .55$).

Predicting interpersonal warmth. As all classes possessed a relatively prestige-based hierarchy, I expected that status overall would generally be positively related to interpersonal warmth. Nonetheless, I still expected that hierarchy type would moderate that relation, such that it would be stronger in classes that were more prestige-based but weaker in classes that were relatively more dominance-based.

To account for the nesting of the data in classes, I used the SPSS mixed models function to test these predictions in a hierarchical set of models, including class as a random effect in the last step (see Table 5.1). In Step 1, I included students' status and the hierarchy type as predictors of their interpersonal warmth. As expected, I found that higher status predicted interpersonal warmth, $F(1,170) = 135.85, p < .001$. The higher participants' status, the more they were liked and included by other students in their class. In addition, I found that hierarchy type predicted interpersonal warmth, $F(1,170) = 14.05, p < .001$. Students in relatively prestige-based as opposed to dominance-based classes were generally better liked and included by others in their class.

At Step 2, I included the interaction term between status and hierarchy type. Including the interaction effect significantly improved the model, $\chi^2_{\text{Change}} = -4.09, p < .05$. The main effects of status, $F(1,170) = 138.51, p < .001$, and hierarchy type, $F(1,170) = 10.09, p = .002$, on interpersonal warmth remained significant. Moreover, in line with my hypothesis, this term additionally predicted warm affiliations, $F(1,170) = 4.13, p = .044$.

At Step 3, I reran this analysis while including class as a random effect. Accounting for the nesting of data in classes significantly improved the model, $\chi^2_{\text{Change}} = -25.22, p < .01$. Moreover, the main effects of status, $F(1,164.35) = 120.45, p < .001$, and hierarchy type, $F(1,10.26) = 7.38, p = .021$, on interpersonal warmth remained significant. However, their interaction no longer predicted interpersonal warmth ($F < 1$).

Gender differences. As social norms differ for males and females (Eagly & Karau, 2002), I examined whether gender qualified the findings in any way. However, mostly null findings emerged. First, females were no more likely than

males to perceive their class as relatively prestige-based (correlation gender and hierarchy type rating: $r(155) = -.04, p = .63$), nor were classes more likely to be prestige-based when they contained more female (correlation between gender and class hierarchy type: $r(155) = -.07, p = .39$).

Second, to assess whether the effect of gender on status depended on the hierarchy type of the class, I included both IVs, together with their interaction, on status in two steps in a mixed model including class as a random effect. In Step 1, I included standardized indices of gender as well as individual scores and group averages of and hierarchy type as fixed effects. Only a significant effect of gender emerged, $F(1,153.14) = 5.13, p = .025$, such that males had higher status than females. In Step 2, adding the interaction term between gender and hierarchy type neither improved the model, $\chi^2_{\text{Change}} = -.53, p > .05$, nor exerted any effect of the interaction term, $F(1,148.52) = .53, p = .467$. In other words, males had higher status than females, but this was equally the case in relatively dominance-based and relatively prestige-based groups.

Finally, I found no gender effects on interpersonal warmth. First, the correlation between gender and interpersonal warmth was not significant, $r(155) = .09, p = .24$. Second, rerunning the analysis predicting interpersonal warmth from status, hierarchy type and their interaction (Step 3), while including gender and its interactions with status and hierarchy type as independent variables (Step 4, Table 5.1) did not significantly improve the earlier model, $\chi^2_{\text{Change}} = -25.22, p < .01$, nor did any of the two-way and three-way interactions of gender with status and hierarchy type reveal significant results (all $ps \geq .337$).

Discussion

Study 5.2 did not find the predicted interaction effect between status and hierarchy type on interpersonal warmth. Although the natural groups in the study varied meaningfully along the dominance-prestige dimension, this variance did not moderate the relation between the status of group members, and the interpersonal warmth shown towards them. In contrast, I did find support for this predicted interaction in Study 5.1.

How might this discrepancy between the studies be explained? Possibly, some unknown confounding or interactive factor accounted for the failure of the finding in Study 5.1 to generalize. Equally possibly, the limited number of groups, well below the 20 recommended for cross-level interactions (Field, 2009), may have provided too little power for the predicted effect to emerge. Unfortunately, practical constraints limited the number of classes available for inclusion in this study: despite contacting multiple colleges in the region only one was eventually willing to participate. Finally, one might expect the impact of dominance-based versus prestige-based hierarchies to be more pronounced across more heterogeneous groups. Thus, the relatively homogenous nature of the groups in terms of hierarchy type may have further dampened any effects present in the data.

General Discussion

How do people of lower status feel towards people of higher status? I argued that this depends on the nature of a group's hierarchy, as it manifests itself in face-to-face interpersonal processes. I found support for this claim in one of the studies reported in this chapter. In Study 5.1, an experimental study, I found that the interpersonal warmth shown towards a hypothetical person of high status was greater

when the hypothetical group the person belonged to was described as having a prestige-based hierarchy—where status is given by the many—than when it was described as having a dominance-based hierarchy—where status is taken by the few. Thus, in prestige-based groups, being liked and included are liable to go hand-in-hand, whereas in dominance-based groups, there is liable to be a trade-off between them.

In Study 5.2, a sociometric study, I found that the interpersonal warmth shown towards real people correlated positively with higher status in real groups, and I found this relation to be stronger in relatively prestige-based hierarchies than in relatively dominance-based hierarchy. However, when I controlled for the nesting of students in the sample in college classes, these findings were no longer significant. Given that Study 5.1 supported the hypotheses, the lack of support in Study 5.2 may be due to the natural limitations of the sample included in the study. In particular, the number of groups included in Study 5.2 (i.e., 10 classes) didn't reach the minimum of 20 recommended for assessing cross-level interactions (Field, 2009) and the groups included in the study were relatively homogenous. Future work assessing larger and more diverse samples might be able to find support for the hypothesized interaction in a natural setting and thus provide ecologically valid support for the hypothesis.

Moreover, other variables may further moderate the relation between status and interpersonal warmth. For example, Schmid Mast and colleagues (Schmid Mast et al., 2009) recently found that status is only related to more interpersonal sensitivity for people who adopt an empathic as opposed to egoistic leadership style. Similarly, when people use harsh rather than soft tactics to influence others, they develop a sense of superiority over team members and come to appreciate them less (Klocke,

2009). Such moderators can readily be accommodated by the conceptual framework I have advanced. Alternatively, contrasting such individual differences in individual styles and tactics with the current distinction between hierarchy types might serve to improve the current theoretical framework.

Given the null-finding in Study 5.2., I am cautious to draw implications from these results, even if the predictions were supported in Study 5.1. However, in combination with the findings in Chapter 3, they shed partial light on the currently mixed findings regarding how people with higher status act towards subordinates. Some research has found that people at or near the top of status hierarchies express higher levels of anger (Tiedens, 2001), and show little interpersonal sensitivity towards subordinates (Galinsky et al., 2006; Goodwin et al., 2000; Gruenfeld et al., 2008), and are liable to engage in more quarrelsome behaviour (Fournier et al., 2002). In contrast, other research has found they are highly interested in others (Chen et al., 2004; Overbeck & Park, 2001), sensitive to their emotions (Schmid Mast et al., 2009), and liable to engage in generous and friendly behaviour (Flynn et al., 2006). I argue that such variations may reflect not only accidental dispositional differences between different high-status individuals, but also intelligible structural differences between the groups they lead. Moreover, the fact that these structural differences specify variations in hierarchy type rooted in evolutionary history offers a means of theoretically illuminating these and other findings.

There is ample research showing that demonstrating one's value to a group is a means of earning prestige, and thus is a viable route to status (Anderson & Kilduff, 2009a). For example, competence and leadership are important predictors of status (Berger et al., 1972; Lord, De Vader, & Alliger, 1986), as are being perceived as generous and helpful (Flynn et al., 2006, Study 3), committed to the task at hand

(Anderson & Shirako, 2008), and willing to contribute to a group (Hardy & Van Vugt, 2006; Willer, 2009). It is important to note that these findings need not imply that coercion may not be an equally successful route to status. Much existing research is run in White Educated Industrialized Rich and Democratic (WEIRD: Henrich, Heine, & Norenzayan, 2010) societies. Thus dominance-based hierarchies may be more important in societies and cultures different from the ones that are generally used for social psychological research. Not only may influence be based on power and aggression as well as value and compassion (Mazur, 1985), but indeed that dominance-based hierarchies may have been the rule rather than the exception in recorded history (Somit & Peterson, 1997). Moreover, people frequently report using manipulative (Lund, Tamnes, Moestue, Buss, & Vollrath, 2007; Kyl-Heku & Buss, 1996) and coercive (Buttermore & Kirkpatrick, 2009; Chen et al., 2010) strategies to get ahead. In addition, even if prototypical dominance-based hierarchies (i.e., groups that are organized around violence or threat as may be the case for e.g. prison populations, street gangs or political dictatorships) represent a minority of human groups, the findings presented both in this chapter and in Chapter 3 suggest that distinguishing between *relatively* dominance-based and *relatively* prestige-based hierarchies can still help to meaningfully predict interpersonal differences in groups.

Theoretical Connections

The current line of research, conceptually and empirically, bears a family resemblance to at least two other lines of research: one on *procedural fairness* (Lind & Tyler, 1988), the other on the *warmth/competence* distinction (Fiske et al., 2007). As these family resemblances help to situate the findings, and could serve as springboard for future integrative research, I close by briefly elaborating them below.

Person perception

It has been argued that people construe both individuals and groups in terms of the two fundamental and largely independent dimensions: warmth and competence (Fiske et al., 2007). Higher status others are generally seen as more competent (Fiske, Cuddy, Glick, & Xu, 2002). I found they can be simultaneously seen as either warmer or colder too. It seems likely that they thereby become targets of either admiration or envy (e.g., religious people vs. rich people, at least according to US stereotypes). In particular, prestige-based hierarchies involve status being granted to others on the basis of respect. Accordingly, admiration is likely to be the cause of their status. However, status-based hierarchies involve status being taken by others on the basis of their power. Accordingly, fear is likely to be the result of their status. Thus, correspondence or opposition between warmth and competence may have meaningful consequences.

Legitimacy

Procedural fairness can be defined as the application of appropriate methods to determine how scarce resources are to be allocated among competing parties. (It contrasts with distributive fairness, which can be defined as the just final allocation of the scarce resources themselves.) Procedures are regarded as procedurally fair when several preconditions are met, but key among them is the opportunity to participate meaningfully in those procedures (Tyler, 2000). Research shows that, even when people are allocated fewer resources than they think they deserve, they are more accepting of the outcome if they have first been permitted to express their point of view (Thibaut & Walker, 1975). Furthermore, they subsequently show greater respect for and deference to the authority that has allocated those scarce resources (Tyler, 1994).

Status is a scarce resource that allows people to achieve a range of beneficial outcomes (Buss, 1999). Therefore, groups with prestige-based hierarchies and dominance-based hierarchies may differ in how procedurally fair the allocation of that resource to group members has been. (This would be the case even if status had been allocated to group members equally.) Specifically, because status is given by group members in prestige-based hierarchies, but is taken from group members in dominance-based hierarchies, lower-status members of the former will have *participated more* in the allocation of higher status to others (that allocation being distributively “unfair”, assuming status equity defines “fair”) than lower-status members of the latter. Thus, the distinction between prestige-based hierarchies and dominance-based hierarchies, together with its implications for how high-status individuals are regarded, has the potential to inform theories that seek to characterize how social groups develop hierarchies of varying legitimacy (Sidanius & Pratto, 1999) via theories that seek to characterize the nature of that legitimacy (Tyler, 2000).

CHAPTER 6

Final Conclusions and Implications: Why It Is Important to Distinguish between Dominance and Prestige Hierarchies

Status refers to a person's position in a group hierarchy. In this thesis, I focused on status in face-to-face groups, investigating the social psychological nature of status. More specifically, I explored (a) the interpersonal behaviours that promote status, (b) the (intrapersonal) self-appraisals of people engaging in such behaviours, and (c) the interpersonal warmth others feel towards people with high status. In other words, I assessed what people need to *do* to attain status, what kind of *people* will most likely engage in such behaviours, and what they might need to *sacrifice* in order to attain status. As I highlighted in the individual chapters of this thesis, all these predictors and outcomes of status have been studied previously, and for each of them such studies have led to mixed results. The current research differs from earlier investigation by assessing the moderating effect of a little explored, but I believe highly important characteristic of groups: their *hierarchy type*.

My starting point for defining group hierarchy types were observations by anthropologists (e.g., Henrich & Gil-White, 2001; Von Rueden et al., 2008; Von Rueden, Gurven & Kaplan, 2011) and evolutionary psychologists (e.g., Buttermore & Kirkpatrick, 2009; Cheng et al., 2010a; Gilbert et al., 1995) of two distinct routes to status: dominance (i.e., grabbing status through force or threats) and prestige (i.e., being granted status out of admiration or respect). A similar distinction also features in the debate in the sociological and social psychological literature. On the one hand, some argue that status results from conflict between people with differing interests and resources (Mills, 1956) and thus accruing to those able to realize their will (i.e.,

grab status) against the resistance of others (Kemper, 1994; Mazur, 1985). On the other hand, some argue that status result from the need to effectively divide roles in order to achieve common goals (Davis & Moore, 1945) and thus granted by group members to individuals who fulfil roles that they value (Berger et al., 1972). The prominence of this distinction across these diverse literatures argues for its fundamental importance.

In this thesis, I first sought to understand the impact of dominance and prestige processes on status in face-to-face groups. In Chapter 2, I demonstrated that assertively claiming status for oneself (i.e., via a dominance process) and willingly being granted status (i.e., via a prestige process) are both viable ways of achieving face-to-face status above and beyond formal status. I also found that these two types of status-achieving processes were mutually antagonistic: status was not further enhanced by engaging in both processes, and perceptions of the group hierarchy being based on each were undermined by mixing it with the other. In other words, rather than group hierarchies having two orthogonal dimensions, they fall along a hierarchy type continuum, ranging from highly dominance-based to highly prestige-based. Depending on their place along this continuum status in groups is attained through dominance-striving, prestige-striving or a mix of the two. This conclusion received further support in Chapters 3 and 5 where I found that, in natural groups, perceived between-group differences along a dominance-prestige continuum were significantly larger than perceived within-group differences. Thus, the hierarchy types of natural groups were perceived to differ along the dominance-prestige continuum.

Having gained an understanding of how hierarchies differ across groups, I turned to the three predictors and consequences of status that I outlined at the

beginning of this chapter: the behaviours promoting status, the self-appraisals of people engaging in those behaviours, and the interpersonal warmth of people with different levels of status. I focused on these three predictors and consequences of status as each provided valuable insight into the social psychological nature of status. The behaviours that promote status provide valuable information about the nature of the status attainment process. Given that status is a highly desirable outcome of group interactions (Fiske, 2010), it is important to understand what behaviours promote that outcome. Moreover, some people may be more inclined to engage in such behaviours than others. Thus these behaviours may lie at the heart of individual status attainment. I focused in particular on self-appraisals as they differ widely across individuals, and such differences may be closely linked to individual differences in status (Cheng et al., 2010a; Kirkpatrick & Ellis, 2001; Leary & Baumeister, 2000). Having found what people need to do to attain status, and who might be likely to engage in such behaviours, I further investigated what it takes to attain status by identifying potential *sacrifices* that need to be made in order to attain status. Given people's fundamental need for warm, supportive contact with others as part of ongoing relationships (Baumeister & Leary, 1995), I focused on a key marker for such relationships: the *interpersonal warmth* they received from others.

In the rest of this chapter I will outline my main findings concerning each of these predictors and consequences of status, and their implications for research and practice. I will also make suggestions for future research.

Interpersonal Behaviours Promoting Status

In both a naturalistic study and an experiment (Chapter 3), I found that agentic behaviour promoted status irrespective of the hierarchy type of a group, but communal behaviour augmented status in more prestige-based hierarchies and

diminished it in more dominance-based hierarchies. Moreover, I found that, in both hierarchy types, agentic behaviour promoted status at high as well as low levels of communal behaviour. In contrast, in both hierarchy types, communal behaviour impacted status only when agentic behaviour was high. I concluded that, while agentic behaviour goes some way in helping people to the top, getting all the way there requires it to be teamed with the right amount of communal (i.e., agreeable) or non-communal (i.e., quarrelsome) behaviour.

These findings make several important contributions to the literature. First, they synthesize two important views in the literature on the nature of status: the functional view (e.g., Berger et al., 1972; Davis & Moore, 1945) and the conflict view (e.g., Mills, 1956; Mazur, 1985). The validity of these views has been the topic of an on-going debate. Proponents of the functional view have argued that the vast majority of human status hierarchies are prestige-based (Anderson and Kilduff, 2009a), a function of living in highly interdependent bands for the most formative period of evolutionary history (Van Vugt, Hogan, et al., 2008). In contrast, proponents of the conflict view have argued that hierarchies based on dominance have been the rule rather than the exception throughout human history (Somit & Peterson, 1997). The current research moves beyond this debate and provides evidence that both the conflict view and the functional view are valid in certain situations. Sometimes, as in dominance-based hierarchies, status is grabbed: here force rather than popularity is the priority—consistent with the conflict view. However, at other times, as in prestige-based hierarchies, status is granted: here popularity rather than force is the priority—consistent with the functional view.

Secondly, they help clarify why research findings pertaining to high status individuals' interest in lower status individuals (e.g., highly interested: Overbeck &

Park, 2001; sensitive to their emotions: Schmid Mast et al., 2009; unperceptive of their emotions: Galinsky et al., 2006; indifferent to their suffering: Van Kleef et al., 2008) find such mixed results. As do research findings pertaining to high status individuals' behaviour towards lower status individuals (e.g., generous and friendly: Flynn et al., 2006; angry: Tiedens, 2001; quarrelsome: Fournier et al., 2002). One reason may be that in some cases the high status of participants in such studies was based on dominance, whereas in other cases it was based on prestige.

Finally, they provide guidance for individuals seeking status by clarifying the conditions under which engaging in agentic and communal behaviour may or may not promote status. An individual's leadership style can shape the nature of group interactions (Lewin, Lippit, & White, 1939) and thus its hierarchy type. However, the survival challenges faced by a group also shape the type of hierarchy that emerges (Kracke, 1978; Van Vugt, Hogan, et al., 2008) and thus the type of leader that emerges. In other words an individual's ability to shape the hierarchy type of a group may be limited by the context in which that group needs to operate. For example, although group members generally tend to resist being subjected to dominant leaders (Boehm, 1999) and may even prefer to leave a group than be subjected to an autocratic leader (Van Vugt et al., 2003), they are more willing to tolerate such leaders when their group faces an external threat, possibly because a dominant leader can handle crisis situations more efficiently than leaders who need to rally support before taking action (Kracke, 1978; Schlessinger, 1986).

My findings revealed that the hierarchy type of a group moderated the impact of communal behaviour, but not agentic behaviour, on status. Thus, agentic behaviour may allow individuals to enhance their status across different types of hierarchies. However, in relatively prestige-based hierarchies, people's status should

benefit from behaviour that is high in communion, whereas the reverse is true in dominance-based hierarchies. Moreover, these effects of communal behaviour are especially strong when people also engage in a high level of agentic behaviour.

Although the studies demonstrated the effect of agentic and communal behaviours on status in dominance and prestige hierarchies, more work is necessary to determine why these effects occur. For example, I found that both agentic and communal behaviours are interpreted in multiple ways (pre-test reported in Chapter 3). However, it is unclear how these multiple interpretations mediate the effect of those behaviours on status in the different hierarchy types. Possibly, the presence of a certain hierarchy type makes some interpretations more *salient* than others. For example, if people saw someone behaving kindly in a dominance-based hierarchy they might more readily associate this behaviour with weakness than with respectfulness, whereas the reverse might be true in a prestige-based hierarchy. Alternatively, some interpretations are simply more *relevant* than others for status in the different hierarchy types. Thus, multiple interpretations may be salient, but only one of the two drives an individual's status attainment. For example, if people saw someone behaving kindly in a dominance-based hierarchy they might associate this behaviour with both weakness and respectfulness, but only their association of this behaviour with weakness would be relevant for the level of status they would attribute to that person.

I also found that the effects of communal behaviour on status were amplified by agentic behaviour. Possibly, the active nature of agentic behaviour multiplies the impact of communal behaviour by making such behaviour more visible (see Anderson & Shirako, 2008, for a similar amplification effect resulting from social

connectedness). Future research may clarify the nature of these and other processes underlying the results presented in this chapter.

Status-Striving and Self-Regard

Having established in Chapter 3 what behaviours it takes to attain status, Chapter 4 investigated what sorts of people might be likely to engage in such behaviours, thus moving the research into the intrapersonal domain. In particular, Chapter 4 investigated whether engagement in status-promoting behaviours was related to individual differences in self-appraisals, as the latter not only vary widely across individuals, but also may be closely linked to individual differences in status (Cheng et al., 2010a; Kirkpatrick & Ellis, 2001; Leary & Baumeister, 2000). Across three studies, self-esteem was consistently associated with behaviours that were high in agency as well as communion, whereas narcissism was consistently associated with behaviours that were high in agency and low in communion. In other words, narcissism was correlated with behaviours that were found (in Chapter 3) to accompany status in dominance-based hierarchies, whereas self-esteem was correlated with behaviours that were found to accompany prestige-based status. These findings have implications for research in a number of areas.

First, they inform theories that view self-esteem as an evolved psychological mechanism that helps people navigate their social world (e.g., Barkow, 1980; Kirkpatrick & Ellis, 2001, 2006; Leary & Baumeister, 2000; Leary & Downs, 1995). According to such theories, self-esteem helps people maintain a certain level of social value. Similar to the way hunger alerts people to their need to acquire and ingest food and motivates them to do so, self-esteem may act as a “sociometer” (Leary & Baumeister, 2000; Leary & Downs, 1995), alerting people to the need to engage in social acts, and a “sociomotivator” (term introduced in Chapter 4),

motivating them to engage in such acts. By demonstrating a relation between self-regard and behaviours that promote social value, the studies provide support for a potential sociomotivator function of self-regard. Moreover, they do so both for self-esteem and for narcissism, and thus imply that both may be evolutionary evolved mechanisms that help people maintain their social value, albeit in different ways. This offers an interesting avenue for exploring existing theories. Moreover, revealing a potentially functional side to narcissism may help to balance the view of (non-clinical) narcissism that is often described as an “unhealthy” trait (cf. Sedikides et al., 2004).

Second, they inform the literature on narcissistic leadership. This literature features numerous studies that focus on the benefits and disadvantages of narcissistic leaders (Rosenthal & Pittinsky, 2006; see Campbell, Hoffman, Campbell, & Marchisio, 2011 for a recent review). For example, Maccoby (2004) argues that, on the upside, narcissistic leaders’ overconfidence helps them to come up with ambitious visions that non-narcissists might not dare venture into, and their energy and confidence help to inspire followers. However, weaknesses of narcissistic leaders may include sensitivity to criticism, poor listening and a lack of empathy (Maccoby, 2004). In this thesis I take a more balanced approach. Rather than proclaiming narcissists to be “good” or “bad” leaders, the studies in this thesis suggest they may be better suited to *attain* leadership roles in some groups (i.e., those with a dominance-based hierarchy) than in others (i.e., those with a prestige-based hierarchy). Even though I am not the first to argue that narcissists’ suitability for leadership roles may depend on context (e.g. Rosenthal & Pittinsky, 2006 argue that narcissists may do well in sales and science; Campbell et al, 2011 argue they do well in newly emerging leadership positions in unstable situations, but not so well in long-

held leadership positions in stable situations), I think my research helps to explain *how* they might attain these positions, by illuminating behavioural processes (i.e., behaviours that are characterized by a combination of high agency and low communion) that may promote narcissists' rise to influence. Thus, this research not only clarifies which people attain status, but also how they are able to do so.

While this is beyond the scope of this thesis, future research may also address whether narcissists are also more *effective* as leaders in dominance-based groups than in prestige-based ones. If so, research might need to focus more on finding ways to ensure that narcissists end up in places where they are the right person for the job, and move on when this is no longer the case, rather than attempting to control and repair the failings of narcissistic leaders (see e.g., Kets de Vries & Miller, 1985; Maccoby, 2004).

Moreover, the narcissistic leadership literature fails to clearly distinguish between self-esteem and narcissism (Rosenthal & Pittinsky, 2006). However, the studies presented here reveal that they are associated with fundamentally different behavioural strategies. Thus, another way that the current research may inform the narcissistic leadership literature is by demonstrating the importance of clearly distinguishing between self-esteem and narcissism. Future research might seek to understand which strengths and weaknesses currently ascribed to narcissistic leaders actually result from their level of self-esteem and which from their level of narcissism.

Status and Interpersonal Warmth

Finally, after having determined what people need to do to attain status and who might be likely to engage in such behaviours, I also focused on potential costs of status in groups. Such costs of status may entail *sacrifices* that need to be made in

order to attain status and thus provide important insight into *what it takes to attain status*, the main theme of this thesis. Moreover, identifying such sacrifices further clarifies who is more likely to attain status, as some people may be more willing to make such sacrifices than others.

As status attainment is an inherently social process, I investigated the effect of people's level of status on the *interpersonal warmth* they receive from others. Foregoing interpersonal warmth in order to gain status qualifies as an important interpersonal sacrifice, given people's strong need to be part of on-going relationships marked by caring and concern (Baumeister & Leary, 1995). Moreover, the effect of status on interpersonal warmth remains poorly understood (Fiske et al., 2007; Lee & Tiedens, 2001). I found in an experimental study that the interpersonal warmth towards individuals increased with status in relatively prestige-based hierarchies and decreased with status in relatively dominance-based hierarchies. In other words, in prestige-based groups, being liked and included are liable to go hand-in-hand, whereas in dominance-based groups, there is liable to be a trade-off between them. However, this finding needs to be interpreted with some caution as I failed to replicate it in a subsequent naturalistic study. This failure to replicate may be the result of limitations of the naturalistic study in terms of the number and range of participants included. While at this stage it seems prudent to err on the side of caution rather than downplaying the null-finding on these grounds, a reasonable interpretation of the effect of status on interpersonal warmth may be derived from the experimental results in combination with the results in Chapter 3 for status attainment and behaviour. In the light of this full set of findings, I propose the results may have some implications for research as well as for individuals striving for status.

Firstly, the studies presented here inform work on status and interpersonal warmth. As outlined in Chapter 5, research suggests that high status individuals are well-connected (Brass, 1984; Ibarra & Andrews, 1993; Lincoln & Miller, 1979) and receive a lot of attention from others (Berger et al., 1972; Chance, 1967; Ellyson et al., 1980; Maner et al., 2008). However, the interpersonal warmth felt towards them (i.e., how liked and included they really are by others) remains unclear. Moreover, research of the interpersonal warmth of high status individuals towards others is mixed (e.g., high-status individuals were found to be highly interested in others: Chen et al., 2004; and sensitive to others thoughts and feelings: Schmid Mast et al., 2009; versus prone to stereotyping: Goodwin et al., 2000; and inconsiderate towards others: Gruenfeld et al., 2008) and may be moderated by individuals' leadership style (empathic versus egoistic: Schmid Mast et al., 2009) or influence tactics (harsh versus soft: Klocke, 2009). Given that warm feelings and behaviours tend to be reciprocated (Byrne & Rhamey, 1965; Sadler & Woody, 2003), these mixed results suggest that the interpersonal warmth of others towards people with high status is also not unequivocal. By presenting hierarchy type as a moderator of the effect of status on interpersonal warmth, the studies presented in Chapter 3 and 5 provide a coherent and much needed explanation for these previous mixed findings.

This result is also potentially important for individuals striving for status and influence. Hierarchy types differ across groups, and may at least partially result of the external conditions in which a group operates (cf., e.g. Kracke, 1978; Schlessinger, 1986), making it difficult for individuals to alter them. Thus, although individuals choose whether to strive to get ahead, to some extent their environment may dictate the behaviours they need to engage in to do so (Chapter 3) as well as the interpersonal consequences this has (Chapter 5). Depending on hierarchy type,

individuals may need to give up heart-felt popularity to gain status and influence. Realizing this, may help potential leaders decide which paths they want to pursue and which they prefer to forsake.

Debates and Future Directions

In the studies reported in this thesis I interchangeably used two ways of measuring status. When referring to status directly was deemed undesirable (e.g., to avoid the risk of confounding measures of status and hierarchy type via common method biases in the naturalistic studies in Chapters 3 and 5) I asked participants to rate both someone's *prominence* and their *influence* in a group. In other cases, I simply asked participants to rate someone's *status* in a group (e.g. in the experimental studies in Chapter 3 and 5). Although both clearly reflective of the underlying construct, both operationalizations relied on only a limited number of items. This limitation did not prevent the hypothesized relations from emerging. Nonetheless, future research may benefit from the development of a more extensive and reliable measure of status in groups. A similar argument may be made about the hierarchy type measure used in the studies reported here. This measure was derived from anthropological descriptions of prestige-based and dominance-based hierarchies. Future work may expand the current measure to cover characteristics that are central to the different hierarchy types.

My conceptualization of status in terms of prominence and influence, rather than in terms of prestige, diverges from a recent trend in social psychological research that considers prestige as the key feature of status in face-to-face groups (e.g., Fiske, 2010; Magee & Galinsky, 2008). However, as outlined at the start of this chapter, my conceptualization reflects a broad research tradition in which status has been described as emerging not just via prestige processes, but also via dominance

(e.g., Buttermore & Kirkpatrick, 2009; Cheng et al., 2010a; Henrich & Gil-White, 2001; Gilbert et al, 1995; Kemper, 1994; Von Rueden et al., 2008; Von Rueden, Gurven & Kaplan, 2011). Moreover, it also reflects lay perceptions of status: as shown in Chapter 2 people perceive status as a result of dominance-processes, prestige-processes, or both. Thus, there are sound theoretical and empirical reasons to use the broader definition of status advocated in this thesis. Nonetheless, the question still arises as to how the results would have differed had my conceptualization and measurement of status included an element of respect/prestige. To address this question I will discuss two ways in which such a conceptualization might have affected the outcomes discussed in this thesis.

First, as noted in Chapter 1, status differences in more prestige-based hierarchies generally result from prestige processes whereas status differences in more dominance-based hierarchies generally result from dominance processes. Therefore, it is likely that the type of prestige-neutral status investigated in this thesis (i.e., status measured solely in terms of status or in terms of both prominence and influence) would be more strongly associated with prestige-positive status (i.e., status including an element of prestige) in more prestige-based groups than in more dominance-based groups. Likewise, the behaviours, types of self-regard, and interpersonal consequences associated with prestige-neutral status in more prestige-based groups should be more strongly related to prestige-positive status than the behaviours, types of self-regard, and interpersonal consequences associated with prestige-neutral status in more dominance-based groups. In other words, one effect of conceptualizing status as prestige-positive rather than prestige-neutral would likely be to strengthen (and thus highlight) the results I found for prestige-based hierarchies

and weaken (and thus downplay) the results I found for dominance-based hierarchies.

Second, as I have argued in the first chapter, dominance and prestige processes often partly co-occur in groups (cf. Anderson et al., 2001). Moreover, in Chapter 2 I found that people perceive hierarchy types to form a continuum ranging from relatively prestige-based to relatively dominance-based. The groups in the middle of this continuum, then, are the ones in which dominance and prestige processes will predominantly co-occur. It is in these groups that behaviour that is both high in agency and low in communion would be most likely to lead to prestige-positive status and that persons high in narcissism would be most likely to attain prestige-positive status. In other words, a second effect of conceptualizing status as prestige-positive rather than prestige neutral might be to weaken (and thus downplay) the importance of low-communion behaviour and of narcissism for attaining status in dominance-based hierarchies and strengthen (and thus highlight) their importance for attaining status in mixed (i.e., halfway between dominance-based and prestige-based) hierarchies. Although such speculations are merely idle they suggest interesting predictions. For one thing, given that prestige-positive status relates positively to interpersonal warmth, groups in the middle of the hierarchy type continuum may offer a safe haven for individuals inclined to aggressively claim status by limiting blows to their popularity.

The studies in this thesis were all conducted in WEIRD (Western, Educated, Industrialized, Rich and Democratic; Henrich et al., 2010) societies. In such societies I found that group hierarchy types differed in terms of the extent to which they were more dominance-based or more prestige-based. However, the groups in my sample were all relatively prestige-based (i.e., on a scale ranging from dominance-based to

prestige-based all groups fell on the prestige-end of the continuum). An interesting path for future research would be to investigate the prevalence of dominance versus prestige hierarchies in natural groups. Moreover, it would be interesting to see whether such prevalence differs across cultures.

Such an investigation might reveal higher numbers of relatively prestige-based hierarchies, and lower numbers of relatively dominance-based hierarchies, in collectivistic cultures relative to individualistic cultures. This would be in line with findings that levels of narcissism tend to be higher in individualistic cultures than in collectivistic cultures (Foster, Campbell, & Twenge, 2003). In general, individualistic cultures harbour more people who are likely to behave in ways that promote status in dominance hierarchies. On the other hand, a closer look at the relation between narcissism and culture suggests that the more benign subscales are the ones that differ most between individualistic and collectivistic cultures (Foster et al, 2003), which are those most likely to correlate highly with self-esteem (Rosenthal & Hooley, 2010). Clearly more research is needed to resolve this issue.

Conclusion

Hierarchy is a defining feature of groups (Berger et al., 1972; Fiske, 2010; Sidanius & Pratto, 1999). The research conducted as part of this thesis demonstrates it is also a diversifying feature of status in groups: depending on the type of hierarchy, status is associated with diametrically different interpersonal behaviours, intrapersonal self-evaluations, and interpersonal outcomes. These individual findings are interesting in themselves. But, in combination they powerfully illustrate the importance of distinguishing between dominance-based and prestige-based groups.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple Regression: Testing and Interpreting Interactions*. Thousand Oaks, CA: Sage Publications.
- Ames, D. R., Rose, P., & Anderson, C. P. (2006). The NPI-16 as a short measure of narcissism. *Journal of Research in Personality*, 40, 440-450.
- Anderson, C., John, O. P., Keltner, D., & Kring, A. M. (2001). Who attains social status? Effects of personality and physical attractiveness in social groups. *Journal of Personality and Social Psychology*, 81, 116-132.
- Anderson, C., & Kilduff, G. J. (2009a). The pursuit of status in social groups. *Current Directions in Psychological Science*, 18, 295-298.
- Anderson, C., & Kilduff, G. J. (2009b). Why do dominant personalities attain influence in face-to-face groups? The competence-signaling effects of trait dominance. *Journal of Personality and Social Psychology*, 96, 491-503.
- Anderson, C., & Shirako, A. (2008). Are individuals' reputations related to their history of behavior? *Journal of Personality and Social Psychology*, 94, 320-333.
- Arndt, J., & Greenberg, J. (1999). The effects of a self-esteem boost and mortality salience on responses to boost relevant and irrelevant worldview threats. *Personality and Social Psychology Bulletin*, 25, 1331-1341.
- Back, M. D., Schmuckle, S. C., & Egloff, B. (2010). Why are narcissists so charming at first sight? Decoding the narcissism–popularity link at zero acquaintance. *Journal of Personality and Social Psychology*, 98, 132-145.
- Barkow, J. H. (1980). Prestige and self-esteem: A biosocial interpretation. In D. R. Omark, F. F. Strayer, & D. G. Freedman (Eds.), *Dominance Relations: An*

- Ethological View of Human Conflict and Social Interaction* (pp. 319-332).
New York, NJ: Garland SMTP Press.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182.
- Baumeister, R. F. (1998). The self. In D. T. Gilbert, S. Fiske, and G. Lindzey (Eds.) *The Handbook of Social Psychology* (4th edition, pp. 680-740). New York, NY: McGraw-Hill.
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, *4*, 1-44.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motive. *Psychological Bulletin*, *117*, 497-529.
- Berger, J., Cohen, B. P., & Zelditch, M., Jr. (1972). Status characteristics and social interaction. *American Sociological Review*, *37*, 241-254.
- Berkowitz, L. (1956). Personality and group position. *Sociometry*, *19*, 210-222.
- Betzig, L. L. (1986). *Despotism and Differential Reproduction: A Darwinian view of History*. Hawthorne, NY: Aldine Publishing Company.
- Blascovich, J., & Tomaka, J. (1991). Measures of self-esteem. In J. P. Robinson, P. R. Shaver, L. S. Wrightsman (Eds.), *Measures of Personality and Social Psychological Attitudes* (pp.115-160). San Diego, CA: Academic Press.
- Block, J., & Thomas, H. (1955). Is satisfaction with self a good measure of self-esteem? *Journal of Abnormal and Social Psychology*, *51*, 254-259.

- Boehm, (1999). *Hierarchy in the Forest: The Evolution of Egalitarian Behavior*.
London: Harvard University Press.
- Bodry, J. G., & Gaertner, L. (2006). Separating status from power as an antecedent of intergroup perception. *Group Processes & Intergroup Relations*, 9, 377-400.
- Brandstadter, J., & Greve, W. (1994). The aging self: Stabilizing and protective processes. *Developmental Review*, 14, 52-80.
- Brass, D. J. (1984). Being in the right place: a structural analysis of individual influence in an organization. *Administrative Science Quarterly*, 29, 518-539.
- Brockner, J. (1983). Low self-esteem and behavioral plasticity. In L. Wheeler & P.R. Shaver (Eds.), *Review of personality and social psychology*, (Vol. 4, pp. 237-271). Beverly Hills, CA: Sage Publications.
- Brown, R. P., & Zeigler-Hill, V. (2004). Narcissism and the non-equivalence of self-esteem measures: A matter of dominance? *Journal of Research in Personality*, 38, 585-592.
- Burke, P. J. (2003). Interaction in Small Groups. In J. DeLamater (Ed.), *Handbook of Social Psychology* (pp. 363-88). New York, NY: Kluwer-Plenum.
- 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, 219-229.
- Buss, D. M. (1999). Human nature and individual differences: The evolution of human personality. In L. A. Pervin and O. P. John (Eds.), *Handbook of Personality* (2nd ed., pp. 31-56). New York, NY: Guildford Press.
- Buttermore, N. R., & Kirkpatrick, L. A. (2009). *Distinguishing Prestige and Dominance: Two Distinct Pathways to Status*. Unpublished Manuscript.

- Byrne, D., & Rhomey, R. (1965). Magnitude of positive and negative reinforcements as a determinant of attraction. *Journal of Personality and Social Psychology*, 2, 884-889.
- Campbell, W. K., Hoffman, B. J., Campbell, S. M., & Marchisio, G. (2011). Narcissism in organizational contexts. *Human Resource Management Review*, 21, 268-284.
- Campbell, W. K., Rudich, E., & Sedikides, C. (2002). Narcissism, self-esteem, and the positivity of self-views: Two portraits of self-love. *Personality and Social Psychology Bulletin*, 28, 358-368.
- Caporael, L. (1996). Coordinating bodies, minds and groups: Evolution and human social cognition. *Journal of Social and Evolutionary Systems*, 19, 261-275.
- Chagnon, N. A. (1992/1968). *Yanomamö* (Fourth edition). Orlando, FL: Harcourt Brace & Company.
- Chance, M. R. A. (1967). Attention structure as the basis of primate rank orders. *Man, New Series*, 2, 503-518.
- Chen, S., Ybarra, O., & Kiefer, A.K. (2004). Power and impression formation: The effects of power on the desire for morality and competence information. *Social Cognition*, 22, 391-421.
- Cheng, J. T., Tracy, J. L., & Henrich, J. (2010a). Pride, Personality, and the Evolutionary Foundations of Human Social Status. *Evolution and Human Behavior*, 31, 334-347.
- Cheng, J. T., Tracy, J. L., & Henrich, J. (2010b, February). *Are Dominance and Prestige Distinct Strategies for Attaining Social Status*. Poster presented at the Society for Personality and Social Psychology Pre-Conference on Evolutionary Psychology. Las Vegas, Nevada. Retrieved from

<http://coevolution.psych.ubc.ca/pdfs/Joey%20SPSP%202010%20Final%20PDF.pdf>

- Coleman, J. S. (1961). *The Adolescent Society*. New York: Free Press.
- Cook, Emerson, Gilmore, & Yamagishi (1983). The distribution of power in exchange networks: Theory and experimental results. *American Journal of Sociology*, 89, 275-305.
- Davis, K., & Moore, W. E. (1945). Some principles of stratification. *American Sociological Review*, 10, 242-249.
- Denissen, J. J. A., Penke, L., Schmitt, D. P., & van Aken, M. A. G. (2008). Self-esteem reactions to social interactions: Evidence for sociometer mechanisms across days, people, and nations. *Journal of Personality and Social Psychology*, 95, 181-196.
- Dentan, R. K. (1979). *The Semai: A Non-Violent People of Malaysia*. New York, NY: Holt, Reinhart, and Winston.
- Di Paula, A., Campbell, J. D. (2002). Self-esteem and persistence in the face of failure. *Journal of Personality and Social Psychology*, 83, 711-724.
- Driskell, J. E., Olmstead, B., & Salas, E. (1993). Task cues, dominance cues, and influence in task groups. *Journal of Applied Psychology*, 78, 51-60.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109, 573-598.
- Eagly, A. H., & Karau, S. J. (1991). Gender and the emergence of leaders: A meta-analysis. *Journal of Personality and Social Psychology*, 60, 685-710.
- Ellis, L. (1994). Social status and health in humans: The nature of the relationship and its possible causes. In L. Ellis (Ed.), *Social stratification and*

- socioeconomic inequality* (Vol. 2., pp. 123-144), Westport, CT: Praeger Publishers.
- Ellyson, S. L., Dovidio, J. F., Corson, R. L. & Vinicur, D. L. (1980). Visual dominance behavior in female dyads: Situational and personality factors. *Social Psychology Quarterly*, 43, 328-336.
- Emmons, R. A. (1984). Factor analysis and construct validity of the Narcissistic Personality Inventory. *Journal of Personality Assessment*, 48, 291–300.
- Emmons, R. A. (1987). Narcissism: Theory and measurement. *Journal of Personality and Social Psychology*, 52, 11-17.
- Field, A. (2009). *Discovering Statistics Using SPSS* (Third edition). London, UK: Sage.
- Fiske, S. T. (2010). Interpersonal stratification: Status, power, and subordination. In S. T. Fiske, D. T., Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., pp. 941-982). New York: Wiley.
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Sciences*, 11, 77-83.
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from status and competition. *Journal of Personality and Social Psychology*, 82, 878-902.
- Flynn, F. J., Reagans, R. E., Amanatullah, E. T., & Ames, D. R. (2006). Helping one's way to the top: Self-monitors achieve status by helping others and knowing who helps whom. *Journal of Personality and Social Psychology*, 91, 1123-1137.

- Foster, J. D., & Campbell, W. K. (2007). Are there such things as “narcissists” in social psychology? A taxometric analysis of the narcissistic personality inventory. *Personality and Individual Differences, 43*, 1321 – 1332.
- Foster, J. D., Campbell, W. K., & Twenge, J. M. (2003). Individual differences in narcissism: Inflated self-views across the lifespan and around the world. *Journal of Research in Personality, 37*, 469-486.
- Fournier, M. A., Moskowitz, D. S., & Zuroff, D. C. (2002). Social rank strategies in hierarchical relationships, *Journal of Personality and Social Psychology, 83*, 425-433.
- Fragale, A. R., Overbeck, J. R., & Neale, M. A. (2011). Resources versus respect: Social judgments based on targets’ power and status positions. *Journal of Experimental Social Psychology, 47*, 767-775.
- Galinsky, A. D., Magee, J. C., Ines, M. E., & Gruenfeld, D. H. (2006). Power and perspectives not taken. *Psychological Science, 17*, 1068-1074.
- Geisinger, K. F. (1994). Cross-cultural normative assessment: Translation and adaptation issues influencing the normative interpretation of assessment instruments. *Psychological Assessment, 6*, 304-312.
- Gilbert, P., Price, J., & Allan, S. (1995). Social comparison, social attractiveness, and evolution: How might they be related? *New Ideas in Psychology, 13*, 149-165.
- Goodwin, S. A., Gubin, A., Fiske, S. T., & Yzerbyt, V. Y. (2000). Power Can Bias Impression Processes: Stereotyping Subordinates by Default and by Design. *Group Processes and Intergroup Relations, 3*, 227-256.
- Gray-Little, B., Williams, V. S. L., & Hancock, T. D. (1997). An item response theory analysis of the Rosenberg self-esteem scale. *Personality and Social Psychology Bulletin, 23*, 443-451.

- Greenberger, E., Chen, C., Dmitrieva, J., & Farruggia, S. P. (2003). Item-wording and the dimensionality of the Rosenberg self-esteem scale: Do they matter? *Personality and Individual Differences, 35*, 1241-1254.
- Gruenfeld, D. H., Inesi, M. E., Magee, J. C., & Galinsky, A. D. (2008). Power and the objectivation of social targets. *Journal of Personality and Social Psychology, 95*, 111-127.
- Gruenfeld, D. H., & Tiedens, L. Z. (2010). Organizational preferences and their consequences. In S. T. Fiske, D. T. Gilbert, & G. Lindsay (Eds.), *The handbook of social psychology* (pp. 1252–1287). (5th ed.). Hoboken, NJ: Wiley.
- Halevy, N., Chou, E., Cohen, T. R., & Livingston, R. (2012). Status conferral in intergroup social dilemmas: Behavioral antecedents and consequences of prestige and dominance. *Journal of Personality and Social Psychology, 102*, 351-366.
- Hardy, C. L., & Van Vugt, M. (2006). Nice guys finish first: The competitive altruism hypothesis. *Personality and Social Psychology Bulletin, 32*, 1402-1413.
- Harter, S., Waters, P. L., & Whitesell, N. R. (1998). Relational self-worth: Differences in perceived worth as a person across interpersonal contexts. *Child Development, 69*, 756-766.
- Hawley, P. (1999). The ontogenesis of Social Dominance: A strategy-based evolutionary perspective. *Developmental Review, 19*, 97-132.
- Heatherton, T. F., Vohs, K. D. (2000), Interpersonal Evaluations Following Threats to Self: Role of Self-Esteem, *Journal of Personality and Social Psychology, 78*, 725-736.

- Henrich, J., & Gil-White, F. J. (2001). The evolution of prestige: Freely conferred deference as a mechanism for enhancing the benefits of cultural transmission. *Evolution and Human Behavior*, 22, 165-196.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33, 61-83.
- Hill, S. E., & Buss, D. M. (2006). The evolution of self-esteem. In M. H. Kernis (Ed.), *Self-esteem Issues and Answers: A Sourcebook of Current Perspectives* (pp. 328-333). New York, NY: Psychology Press.
- Ibarra, H., & Andrews, S. B. (1993). Power, social influence, and sense making: Effects of Network Centrality and Proximity on Employee Perceptions, *Administrative Science Quarterly*, 38, 277-303.
- James, W. (1890/1950). *The Principles of Psychology: Volume One*. Mineola, NY: Dover Publications.
- Janis, I. L. (1954). Personality correlates of susceptibility to persuasion. *Journal of Personality*, 22, 504-518.
- John, O. P., & Robins, R. W. (1994). Accuracy and bias in self-perception: Individual differences in self-enhancement and the role of narcissism. *Journal of Personality and Social Psychology*, 66, 206-219.
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, 110, 265-284.
- Kemper, T. D. (1994). Social stratification, testosterone, and male sexuality. In L. Ellis (Ed.), *Social Stratification and Socioeconomic Inequality* (Vol. 2, pp. 47-61). Westport, CT: Greenwood Publishing Group.
- Kenny, D. A. (1994). *Interpersonal Perception*. New York: Guildford Press.

- Kenny, D. A., & La Voie, L. (1984). The social relations model. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 18, pp. 142–182). Orlando, FL: Academic Press.
- Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry, 14*, 1-26.
- Kets de Vries, M. F. R., & Miller, D. (1985). Narcissism and leadership: An object relations perspective. *Human Relations, 38*, 583-601.
- Kipnis, D. (1972). Does power corrupt? *Journal of Personality and Social Psychology, 24*, 33-41.
- Kirkpatrick, L., & Ellis, B. (2001). An evolutionary-psychological approach to self-esteem: Multiple domains and multiple functions. In G. Fletcher & M. Clark (Eds.), *The Blackwell Handbook of Social Psychology: Vol. 2: Interpersonal Processes* (pp. 411-436). Oxford, UK: Blackwell.
- Kirkpatrick, L., & Ellis, B. (2006). What is the evolutionary significance of self-esteem? The adaptive functions of self-evaluative psychological mechanisms. In M. H. Kernis (Ed.), *Self-esteem: Issues and Answers*. New York, NY: Psychology Press.
- Klocke (2009). “I am the best”: Effects of influence tactics and power bases on powerholders’ self- and target-evaluations. *Group Processes and Intergroup Relations, 12*, 619-637.
- Kracke, W. (1978). *Force and Persuasion. Leadership in an Amazonian Society*. Chicago, IL: The University of Chicago Press.
- Kwan, V. S. Y., John, O. P., Kenny, D. A., Bond, M. H., & Robins, R. W. (2004). Reconceptualizing individual differences in self-enhancement bias: An interpersonal approach. *Psychological Review, 111*, 94-110.

- Kwan, V. S. Y., & Mandisodza, A. N. (2007). Self-esteem: On the relation between conceptualization and measurement. In C. Sedikides & S. J. Spencer (Eds.), *Frontiers of social psychology: The self* (pp. 259-282). New York, NY: Psychology Press.
- Kyl-Heku, L. M., & Buss, D. M. (1996). Tactics as units of analysis in personality psychology: An illustration using tactics of hierarchy negotiation. *Personality & Individual Differences, 21*, 497-517.
- Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In M. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 32, pp. 1-62). San Diego, CA: Academic Press.
- Leary, M. R., & Downs, D. L. (1995). Interpersonal functions of the self-esteem motive: The self-esteem system as a sociometer. In M. H. Kernis (Ed.), *Efficacy, Agency, and Self-Esteem* (pp. 123-144). New York: Plenum.
- Leary, M. R., Gallagher, B., Fors, E., Buttermore, N., Baldwin, E., Kennedy, K., & Mills, A. (2003). The invalidity of disclaimers about the effect of social feedback on self-esteem. *Personality and Social Psychology Bulletin, 29*, 623-636.
- Leary, M. R., & MacDonald, G. (2003). Individual differences in self-esteem: A review and theoretical integration. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of Self and Identity*. New York: Guilford Press
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology, 68*, 518-530.
- Leavitt, H. J. (1951). Some effects of certain patterns on group performance. *Journal of Abnormal and Social Psychology, 46*, 38-50.

- Lee, F., & Tiedens, L. Z. (2001). Is it lonely at the top? The independence and interdependence of power holders. *Research in Organizational Behavior*, 23, 43-91.
- LePine, J. A., & Van Dyne, L. (1998). Predicting voice behavior in work groups. *Journal of Applied Psychology*, 83, 853-868.
- Lewin, K., Lippitt, R. and White, R.K. (1939). Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology*, 10, 271-301.
- Lincoln, J. R., & Miller, J. (1979). Work and Friendship Ties in Organizations: A Comparative Analysis of Relation Networks. *Administrative Science Quarterly*, 24, 181-199.
- Lind, E.A., & Tyler, T.R. (1988). *The social psychology of procedural justice*. New York: Plenum Press.
- Locke, K. D. (2008). Aggression, narcissism, self-esteem, and the attribution of desirable and humanizing traits to self versus others. *Journal of Research in Personality*, 43, 99-102.
- Lord, R. G., De Vader, C. L., & Alliger, G. M. (1986). A meta-analysis of the relation between personality traits and leadership perceptions: an application of validity generalization procedures. *Journal of Applied Psychology*, 71, 402-410.
- Lund, O. C. H., Tamnes, C. K., Moestue, C., Buss, D. M., & Vollrath, M. (2007). Tactics of hierarchy negotiation. *Journal of Research in Personality*. 41, 25-44.
- Maccoby, M. (2004). Narcissistic leaders: The incredible pros, the inevitable cons. *Harvard Business Review*, 78, 92-101.

- Magee, J. C., & Galinsky, A. D. (2008). Social Hierarchy: The self-reinforcing nature of power and status. *Academy of Management Annals*, 2, 351-398.
- Maner, J. K., DeWall, C. N., & Gailliot, M. T. (2008). Selective attention to signs of success: Social dominance and early stage interpersonal perception. *Personality and Social Psychology Bulletin*, 34, 488-501.
- Mazur, A. (1985). A biosocial model of status in face-to-face primate groups. *Social Forces*, 64, 377-402.
- McFarlin, D. B., Baumeister, R. F., & Blascovich, J. (1984). On knowing when to quit: Task failure, self-esteem, advice, and nonproductive persistence. *Journal of Personality*, 52, 138-155.
- Mills, C. W. (1956). *The power elite*. Oxford: Oxford University Press.
- Moore, J. C. (1968). Status and influence in small group interactions. *Sociometry*, 31, 47-63.
- Moskowitz, D. S. (1994). Cross-situational generality and the interpersonal circumplex. *Journal of Personality and Social Psychology*, 66, 921-933.
- Moskowitz, D. S., Suh, E. J., Desaulniers, J. (1994). Situational influences on gender differences in agency and communion. *Journal of Personality and Social Psychology*, 66, 753-761.
- Moskowitz, D. S., & Zuroff, D. C. (2005). Assessing interpersonal perceptions using the interpersonal grid. *Psychological Assessment*, 17, 218-230.
- Overbeck, J. R., & Park, B. (2001). When power does not corrupt: Superior individuation processes among powerful perceivers. *Journal of Personality and Social Psychology*, 81, 549-565.

- Padilla, A., Hogan, R., & Kaiser, R. B. (2007). The toxic triangle: Destructive leaders, susceptible followers, and conducive environments. *Leadership Quarterly, 18*, 176-194.
- Paulhus, D. L., Robins, R. W., Trzesniewski, K. H., & Tracy, J. L. (2004). Two replicable suppressor situations in personality research. *Multivariate Behavioral Research, 39*, 303-328.
- Paulhus, D. L. & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality, 36*, 556-563.
- Petty, R. E., & Wegener, D. T. (1998). Attitude change: Multiple roles of persuasion variables. In D.T. Gilbert, S. T. Fiske, & L. Gardner (Eds.), *The Handbook of Social Psychology* (pp. 323-390). Boston, MA: McGraw-Hill.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., Podsakoff, N. P. (2003). Common method bias in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879-903.
- Preuschoft, S., & van Hooff, J. A. R. A. M. (1997). The social function of “smile” and “laughter” across primate species and societies. In U. Segerstrale & P. Molnar (Eds.), *Nonverbal communication: Where nature meets culture* (pp. 171-189). Mahwah, NJ Lawrence Erlbaum.
- Price, J. (2000). Subordination, self-esteem, and depression. In L. Sloman & P. Gilbert (Eds.), *Subordination and Defeat: An Evolutionary Approach to Mood Disorders and Their Therapy* (pp. 165-177). Mahwah, NJ: Lawrence Erlbaum.
- 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*, 890-902.

- Rhodewalt, F., & Morf, C. C. (1995). Self and interpersonal correlates of the narcissistic personality inventory: A review and new findings. *Journal of Research in Personality, 29*, 1-23.
- Ridgeway, C. (1987). Dominance and the basis of status in task groups. *American Sociological Review, 52*, 683-694.
- Rosenberg, M. (1965). *Society and the Adolescent Self-Image*. Princeton, NJ: Princeton University Press.
- Rosenthal, S. A., & Hooley, J. M. (2010). Narcissism assessment in social-personality research: Does the association between narcissism and psychological health result from a confound with self-esteem? *Journal of Research in Personality, 44*, 453-465.
- Rosenthal, S. A., & Pittinsky, T. L. (2006). Narcissistic leadership. *The Leadership Quarterly, 17*, 617-633.
- Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and benefits of counterstereotypical impression management. *Journal of Personality and Social Psychology, 74*, 629-645.
- Sachdev, I., & Bourhis, R. Y. (1991). Power and status differentials in minority and majority group relations. *European Journal of Social Psychology, 21*, 1-24.
- Sadler, P., & Woody, E. (2003). Is who you are who you're talking to? Interpersonal style and complementarity in mixed-sex interactions. *Journal of Personality and Social Psychology, 84*, 80-96.
- Sakellaropoulo, M., & Baldwin, M. W. (2007). The hidden sides of self-esteem: Two dimensions of implicit self-esteem and their relation to narcissistic reactions. *Journal of Experimental Social Psychology, 43*, 995-1001.

- Salmivalli, C., Kaukiainen, A., Kaistaniemi, L., & Lagerspetz, K. M. J. (1999). Self-evaluated self-esteem, peer-evaluated self-esteem, and defensive egotism as predictors of adolescents' participation in bullying situations. *Personality and Social Psychology Bulletin*, *25*, 1268-1278.
- Schlessinger, A. M., Jr. (1986). *The Cycles of American History*. Boston, MA: Houghton Mifflin Company.
- Schmid Mast, M., Jonas, K., & Hall, J. A. (2009). Give a person power and he or she will show interpersonal sensitivity: The phenomenon and its why and when. *Journal of Personality and Social Psychology*, *97*, 835-850.
- Sedikides, C., Campbell, W.K., Reeder, G.D., Elliot, A.J. and Gregg, A.P. (2002) Do others bring out the worst in narcissists? The "others exist for me" illusion. In, Y. Kashima, M. Foddy, and M. Platow (eds.) *Self and Identity: Personal, Social, and Symbolic*. New Jersey, USA, Lawrence Erlbaum Associates, 103-123.
- Sedikides, C., & Gregg, A. P. (2001). Narcissists and feedback: Motivational surfeits and motivational deficits. *Psychological Inquiry*, *12*, 237-239.
- Sedikides, C., Rudich, E. A., Gregg, A. P., Kumashiro, M., & Rusbult, C. (2004). Are normal narcissists psychologically healthy? Self-esteem matters. *Journal of Personality and Social Psychology*, *87*, 400-416.
- Shaw, M.E. (1964). Communication networks. In L. Berkowitz (Ed.), *Advances in experimental social psychology, Volume 1* (pp. 111-147). New York: Academic Press.
- Shelly, R. K., & Troyer, L. (2001). Emergence and completion of structure in initially undefined and partially defined groups. *Social Psychology Quarterly*, *64*, 318-332.

- Shrauger, J. S., & Sorman, P. B. (1977). Self-evaluations, initial success and failure, and improvement as determinants of persistence. *Journal of Consulting and Clinical Psychology, 45*, 784-795.
- Sidanius, J. & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. New York: Cambridge University Press.
- Smalley, R. L., & Stake, J. E. (1996). Evaluating Sources of Ego-Threatening Feedback: Self-Esteem and Narcissism Effects. *Journal of Research in Personality, 30*, 483-495.
- Snyder, J., Kirkpatrick, L. A., & Barrett, H. C. (2008). The dominance dilemma: Do women really prefer dominant mates? *Personal Relationships, 15*, 425–444.
- Somit, A., & Peterson, S. A. (1997). *Darwinism, dominance and democracy: The biological bases of authoritarianism*. Westport, CT: Praeger Publishers.
- Tafarodi, R. W., & Swann, W. B., Jr. (2001). Two-dimensional self-esteem: theory and measurement. *Personality and Individual Differences, 31*, 653-673.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behaviour. *Advances in Experimental Social Psychology, 21*, 181-227.
- Thibaut, J., & Walker, L. (1975). *Procedural justice*. Hillsdale, NJ: Lawrence Erlbaum Associates Inc.
- Tiedens, L. Z. (2001). Anger and advancement versus sadness and subjugation: The effect of negative emotion expressions on social status conferral. *Journal of Personality and Social Psychology, 80*, 86-94.
- Tracy, J. L., & Robins, R. W. (2003). “Death of a narcissistic salesman”: An integrative model of fragile self-esteem. *Psychological Inquiry, 14*, 57-62.

- Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. (2003). Stability of self-esteem across the life span. *Journal of Personality and Social Psychology*, *84*, 205-220.
- Twenge, J. M., & Campbell, K. W. (2003). Isn't it fun to get the respect that we're going to deserve? Narcissism, Social Rejection, and Aggression. *Personality and Social Psychology Bulletin*, *29*, 261-272.
- Tyler, T.R. (1994). Governing amid diversity: The effect of fair decision-making procedures on the legitimacy of government. *Law and Society Review*, *28*, 809-831.
- Tyler, T.R. (2000). Social justice. *International Journal of Psychology*, *35*, 117-125.
- Thibaut, J., & Walker, L. (1975). *Procedural justice*. Hillsdale, NJ: Lawrence Erlbaum Associates Inc.
- Van de Ven, N., Zeelenberg, M., & Pieters, R. (2009). Leveling up and down: The experiences of benign and malicious envy. *Emotion*, *9*, 419-429.
- Van Kleef, G. A., Homan, A. C., Finkenauer, C., Gündemir, S., & Stamkou, E. (2011). Breaking the rules to rise to power: How norm violators gain power in the eyes of others. *Social Psychological and Personality Science*, *2*, 500-507.
- Van Kleef, G. A., Oveis, C., Van der Lö we, I, LuoKogan, A., Goetz, J., & Keltner, D. (2008). Power, distress, and compassion: Turning a blind eye to the suffering of others. *Psychological Science*, *19*, 1315-1322.
- Van Vugt, M. (2006). The evolutionary origins of leadership and followership. *Personality and Social Psychology Review*, *10*, 354-372.
- Van Vugt, M., Hogan, R., & Kaiser, R. (2008). Leadership, followership, and evolution: Some lessons from the past. *American Psychologist*, *63*, 182-196.

- Van Vugt, M., Jepson, S. F., Hart, C. M., & De Cremer, D. (2004). Autocratic leadership in social dilemmas: A threat to group stability. *Journal of Experimental Social Psychology, 40*, 1-13.
- Vohs, K. D., & Heatherton, T. F., (2001). Self-esteem and threats to self: implications for self-construal and interpersonal perceptions. *Journal of Personality and Social Psychology, 81*, 1103-1118.
- Von Rueden, C., Gurven, M., & Kaplan, H. (2008). Multiple dimensions of male social statuses in an Amazonian society. *Evolution and Human Behavior, 29*, 402-415.
- Von Rueden, C., Gurven, M., & Kaplan, H. (2011). Why do men seek status? Fitness payoffs to dominance and prestige. *Proceedings of the Royal Society of Biological Sciences, 278*, 2223-2232.
- Wells, A. J. (1988). Variations in mothers' self-esteem in daily life. *Journal of Personality and Social Psychology, 55*, 661-668.
- Wiggins, J. S. (1979). A psychological taxonomy of trait-descriptive terms: The interpersonal domain. *Journal of Personality and Social Psychology, 37*, 395-412.
- Wiggins, J. S., Trapnell, P., & Phillips, N. (1988). Psychometric and geometric characteristics of the revised interpersonal adjective scales (IAS-R). *Multivariate Behavioral Research, 23*, 517-530.
- Willer, R. (2009). Groups reward individual sacrifice: The status solution to the collective action problem. *American Sociological Review, 74*, 23-43.
- Zeigler-Hill, V. (2010). The interpersonal nature of self-esteem: Do different measures of self-esteem possess similar interpersonal content? *Journal of Research in Personality, 44*, 22-30.

FOOTNOTES

Chapter 1

¹ Relative levels of dominance and prestige form a continuous range.

Therefore, it would be more accurate to refer to hierarchy types as continuous “traits” rather than distinctive “types”. However, given the unfamiliarity of the term “trait” for describing a group-level characteristic I use the term “type” instead.

Chapter 2

¹ The elaboration likelihood model posits a trade-off between being persuaded by the propositional content available in a message and being persuaded by peripheral clues as to its value or validity. While these types of information are not in themselves mutually exclusive, they are when considered in light of some external factor, in this case the level of scrutiny to which they are subjected (scrutiny lowers the persuasiveness of peripheral cues and heightens that of factual information). Similarly, claiming status and being granted status need not in themselves be mutually exclusive, but they may be in light of some external factor (e.g., the level of threat in the environment, cf. Kracke, 1978; Schlessinger, 1986).

² As recommended by cross-cultural psychologists (e.g., Geisinger, 1994), the translations of these vignettes, as well as other manipulations administered in Dutch as part of the research in this thesis, were all verified by a small panel of experts rather than by back-translation. In all cases, the panel consisted of the author and a research assistant, who are both fluent in Dutch as well as English. Due to the small size of the committee, both completed independent translations of the manipulations before discussing and resolving discrepancies.

Chapter 3

¹ Hierarchies are termed *dominance-based* or *prestige-based* to indicate they are based on respectively dominance or prestige *processes*. However, for readability I sometimes refer to them more briefly as dominance hierarchies and prestige hierarchies.

² In deciding the cut-off criterion I aimed to strike a balance between the loss of data resulting from excluding participants and the number of blanks that would need to be filled in when retaining participants. An iterative process revealed that increasing this percentage greatly decreased the number of participants retained, whereas a decrease drastically increased the number of data missing in the dataset.

Chapter 4

¹ The terms “non-clinical narcissism” and “normal narcissism” are used to distinguish narcissism as a normally distributed personality trait from the related pathological condition (Foster & Campbell, 2007). All the research cited in this paper is related to this non-clinical form of narcissism. For the sake of brevity I will use the term “narcissism”.

² For example, in this chapter I found moderate correlations between trait self-esteem and narcissism in both Study 4.1, $r(149) = .31, p < .001$, and Study 4.2, $r(59) = .19, p = .014$. Moreover, in Study 4.3 I also found small but significant correlations at the state level in four experimental conditions, $r(98) = .21, p = .042$ (low narcissism condition, lowest), and a marginal correlation in the fourth that were, $r(95) = .18, p = .076$ (high narcissism condition).

³ Although this is not a conclusive test of the uniqueness of each participant (the same person might use different computers or different people may take part on

the same computer) it is a reasonable test and a commonly accepted method to check for duplicate participants (Gosling, Vazire, Srivastava, & John, 2004).

⁴Principal axis factoring of the self-esteem items failed to identify a separate self-liking and self-competence subscale. Rather, inspection of the screeplot revealed the presence of just one component. All the items of the scale loaded onto this component, with loadings ranging from .33 to .76. The discussion is therefore limited to overall self-esteem.

⁵ To stay in line with earlier work, I followed Moskowitz' (1994) example of using Cronbach Alpha for evaluating inter-rater agreement. However, in order to do so I needed to assume that the poles of the interpersonal circumplex are independent. While the raters scored each pole independently, dominance is not independent from submissiveness, nor is agreeableness independent from quarrelsomeness. As a result, this method inflates the obtained alpha values. To compensate for the inflated alpha levels, I observed strict limits for the level of alpha at which I assumed that inter-rater agreement exists. Moreover, I augmented the assessment of inter-rater agreement with a more definitive test of dimensional accuracy.

⁶ Including or excluding these participants did not change the general pattern of the findings.

Chapter 5

¹ Following an extensive review of the status literature, Anderson and colleagues (2001) concluded that definitions of face-to-face status generally pertain to any of three highly correlated types of standing that individuals can attain within in a group, namely, prominence, influence, and respect. I focus on the first two types only, as the last applies only to status based on prestige.

² Means for round-robin measures were obtained by calculating the average score given by each rater, and then averaging across raters. The need to rely on peer ratings for both measures raises the possibility of common method bias (see Podsakoff, MacKenzie, Lee, & Podsakoff, 2003, for a review). However, although status and interpersonal warmth were both measured using peer-ratings, no predictions were made about the direct (i.e., unmoderated) relation between the two. Moreover, to further reduce the risk of common method bias, participants rated the status of each of their peers at the individual level, and on a 7-point scale, but rated hierarchy type at the class level, on a 6-point scale.

³ Part of this data was reported in Study 3.1.

⁴ I ran *t*-tests comparing scores of participants absent at one of the sessions with those of participants present at both. These subsets did not differ significantly in how they rated themselves, their peers, or their class on any of the measures (all *ps* < .05). Moreover, participants absent from the second session did not differ demographically from those present at both sessions.

TABLES AND FIGURES

Table 2.1

Study 2.1: Perceptions of Hierarchy Type as a Function of the Experimental Manipulation of whether the Group Hierarchy was Dominance-Based or Prestige-Based

Perception of Hierarchy Type	Experimental Conditions		
	Low Dominance & High Prestige	High Dominance & High Prestige	High Dominance & Low Prestige
<i>N</i>	41	44	40
Based on Dominance	4.09 (1.36)	5.16 (1.14)	5.77 (.85)
Based on Prestige	5.34 (.85)	4.83 (1.20)	2.67 (.98)

Note. Figures without brackets represent means. Figures in brackets represent standard deviations. Scale values range from 1 to 7. The Low Dominance & Low Prestige condition of the full 2 x 2 design is omitted.

Table 3.1

Study 3.1: Fixed Effects Estimates (Top) and Variance-Covariance Estimates

(Bottom) for Models Predicting Group Members' Status

Parameter	Model 1A	Model 1B	Model 2A	Model 2B
Fixed effects				
Intercept	4.29 (.05)	4.31 (.07)	4.28 (.05)	4.29 (.06)
Agentic Behaviour	.52 (.05)	.52 (.05)	.53 (.05)	.53 (.05)
Communal Behaviour	-.04 (.05)	-.04 (.05)	-.05 (.05)	-.04 (.05)
Hierarchy Type (individual rating)	-.01 (.05)	-.01 (.05)	-.02 (.05)	-.02 (.05)
Hierarchy Type (group average)	-.10 (.05)	-.13 (.07)	-.08 (.05)	-.10 (.06)
Communal Behaviour X Hierarchy Type (group average)			-.09 (.04)	-.08 (.04)
Random parameters				
Intercept	.39 (.04)	.37 (.04)	.38 (.04)	.37 (.04)
Class		.02 (.02)		.01 (.02)
-2*log likelihood	322.28	320.23	316.73	315.96

Note. $N = 170$. Standard errors are in parentheses.

Figure 3.1

Study 3.1: Target status as a function of Behaviour exhibited by the target, plotted for hierarchy types of college classes calculated one standard deviation below and above the mean

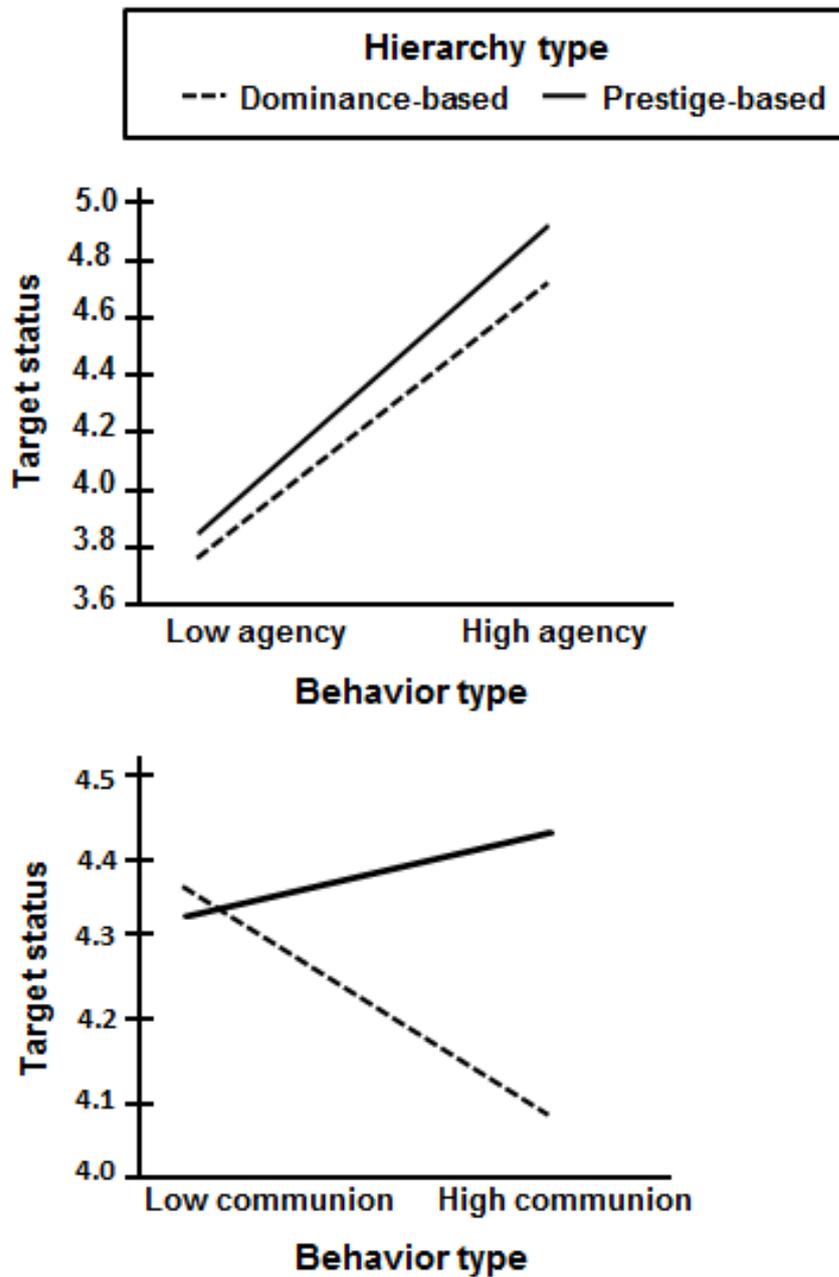
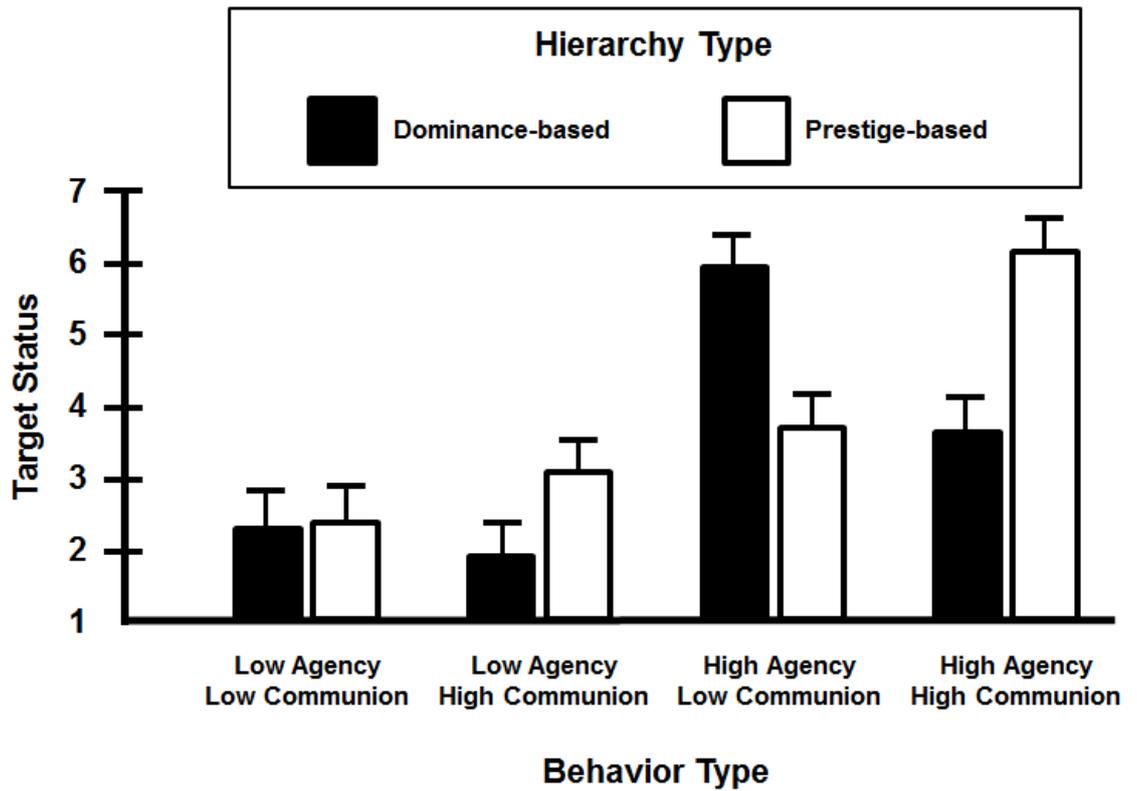


Figure 3.2

Study 3.2: Mean differences in target status as a function of the hierarchy type of student group (either Dominance-based or Prestige-based) and of the type of behaviour exhibited by one of its members (either high or low in Agency, and high or low in Communion)



Note. Bars represent standard errors.

Table 4.1

Study 4.1: Means, Standard Deviations and Cronbach Alpha values

<i>Variable</i>	<i>Sample A (N = 159)</i>			<i>Sample B (N = 128)</i>		
	<i>M</i>	<i>SD</i>	<i>Alpha</i>	<i>M</i>	<i>SD</i>	<i>Alpha</i>
Self-liking	4.25	1.22	.91	-	-	-
Self-competence	4.38	.84	.79	-	-	-
Self-esteem (SLSC-R)	4.33	.92	.90	-	-	-
Self-esteem (RSES)	-	-	-	5.31	1.07	.90
Narcissism	.23	.17	.78	-	-	-
Agentic behaviour	4.47	.70	.88	4.47	.84	.92
Communal behaviour	4.99	.58	.83	4.97	.56	.79

Table 4.2

Study 4.1: Correlation (Significance) Values

		Agentic	Communal
Self-esteem (RSES) ^a	Bivariate	.57 (< .001)	.13 (= .167)
Self-esteem (SLCS-R) ^b	Bivariate	.41 (< .001)	.11 (= .188)
	Partial	.39 (< .001)	.25 (= .004)
Narcissism (NPI-40) ^b	Bivariate	.29 (< .001)	-.33 (< .001)
	Partial	.22 (= .010)	-.33 (< .001)

Note. Correlations in Study 4.1 of self-esteem (bivariate and partialled for narcissism) and narcissism (bivariate and partialled for self-esteem) with agentic behaviour. RSES = the Rosenberg Self-Esteem Scale (Rosenberg, 1965). SLCS-R = revised self-liking/self-competence scale (Tafarodi & Swann, 2001). NPI-16 = Narcissistic Personality Inventory (Ames et al., 2006).

^a *N* = 159. ^b *N* = 128.

Table 4.3

Study 4.2: Means, Standard Deviations, and Cronbach Alpha values

Variable	<i>M</i>	<i>SD</i>	<i>Alpha</i>
Self-esteem	5.19	.99	.87
Narcissism	.29	.17	.86
Behaviour choice:			
Low Agency/High Communion	25.8%	12.5%	.57
High Agency/High Communion	34.2%	13.7%	.59
Low Agency/Low Communion	20.7%	9.3%	.39
High Agency/Low Communion	19.3%	15.4%	.72

Note. $N = 63$.

Table 4.4

Study 4.2: Correlation (Significance) values

		LA/LC	HA/LC	LA/HC	HA/HC
Self-esteem	Bivariate	-.269	-.004	-.122	.298
		(.036)	(.979)	(.350)	(.020)
	Partial	-.173	-.212	.014	.311
		(< .201)	(.117)	(.966)	(.020)
Narcissism	Bivariate	-.148	.563	-.450	-.136
		(.271)	(< .001)	(< .001)	(.312)
	Partial	-.084	.589	-.432	-.239
		(.541)	(< .001)	(< .001)	(.076)

Note. Correlations between self-esteem (bivariate and partialled for narcissism) and different behavioural strategies. $N = 63$. LA/LC = Low Agency/Low Communion behaviour; HA/LC = High Agency/Low Communion behaviour; LA/HC = Low Agency/High Communion behaviour; HA/HC = High Agency/High Communion behaviour.

* $p < .050$. ** $p < .005$.

Table 4.5

Study 4.3: Means, Standard Deviations and Cronbach Alpha values

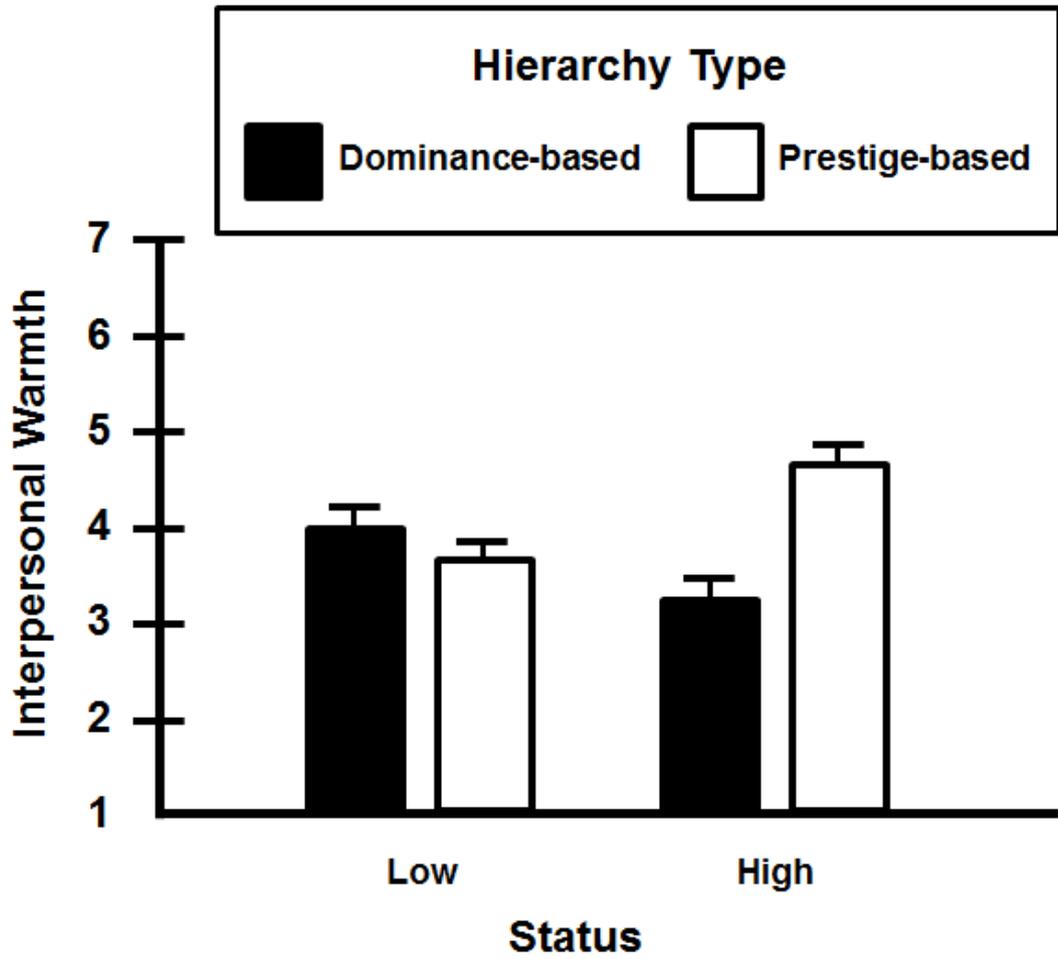
		Trait level ^a		Condition			
				HN ^b	LN ^b	HSE ^b	LSE ^b
Self-esteem	<i>M</i>	5.70	6.26	5.47	6.21	2.20	
	<i>SD</i>	.99	.86	1.14	.94	1.08	
	<i>r</i>	.56	.86	.82	.88	.70	
Narcissism	<i>M</i>	.41	.45	.23	.38	.22	
	<i>SD</i>	.21	.21	.14	.19	.16	
	<i>α</i>	.96	.69	.44	.65	.62	
Agentic	<i>M</i>		.62	.49	.62	.42	
Behaviour	<i>SD</i>		.16	.17	.13	.19	
	<i>α</i>		.75	.73	.60	.78	
Communal	<i>M</i>		.78	.81	.76	.51	
Behaviour	<i>SD</i>		.13	.13	.13	.19	
	<i>α</i>		.62	.67	.57	.76	

Note. HN = high narcissism; LN = low narcissism; HSE = high self-esteem; LSE = low self-esteem.

^a *N* = 58. ^b *N* = 110.

Figure 5.1

Study 5.1: Interpersonal warmth shown towards a group member as a function of the experimental manipulation of hierarchy type (dominance-based or prestige-based) and status (high or low)



Note. Error bars represent standard errors of the cell means.

Table 5.1

Study 5.1: Fixed Effects Estimates (Top) and Variance-Covariance Estimates (Bottom) for Models Predicting Group Members' Interpersonal Warmth

Parameter	Model 1	Model 2	Model 3	Model 4
Fixed effects				
Intercept	5.19 (.03)	5.18 (.03)	5.23 (.09)	5.24 (.09)
Status	.38 (.03)	.38 (.03)	.33 (.03)	.33 (.03)
Hierarchy Type (individual rating)	< -.01 (.03)	< -.01 (.05)	-.01 (.03)	-.01 (.03)
Hierarchy Type (group average)	-.13 (.03)	-.11 (.03)	-.22 (.08)	-.23 (.08)
Status X Hierarchy Type (group average)		-.06 (.03)	-.02 (.03)	.02 (.03)
Gender				-.01 (.03)
Gender X Status				.03 (.04)
Gender X Hierarchy Type (group average)				.01 (.04)
Gender X Status X Hierarchy Type (group average)				<-.01 (.04)
Random parameters				
Intercept	.18 (.02)	.17 (.02)	.13 (.02)	.14 (.02)
Class			.07 (.04)	.07 (.04)
-2*log likelihood	188.50	184.41	159.19	152.29

Note. $N = 170$. Standard errors are in parentheses.

APPENDICES

Appendix 1.1: Example of a dominance-based status conflict in the Yānomamö tribe

Chagnon (1968/1992, pp. 134-135) describes how the position of the headman of the violent Amazonian Yānomamö tribe, Koḡbawä, is challenged by an ambitious group member called Hontonawä, and Koḡbawä defends his position through threat of force. In the described event, Hontonawä and his followers attempt to murder visitors to the village, who Koḡbawä earlier had pledged to defend and was now guarding:

“Hontonawä and his men appeared in their black paint and took up strategic positions around the village. He himself held an axe. He strutted arrogantly and with determination up to the visitors holding his axe over his head as if he were ready to strike. The village became very quiet, and most of the women and children fled nervously. Neither Koḡbawä nor the Patanowä-teri visitors batted an eyelash as Hontonawä stood there, menacing the visitors, although the others were visibly anxious and sat up abruptly in their hammocks. It was a showdown. But instead of striking the visitors with his axe as he seemed to be preparing to do, he brought the axe down to his side and aggressively invited one of the visitors out to chant with him. Within seconds all three the visitors had paired off with members of Hontonawä’s group and were chanting passionately with them ... The crisis had been averted because of Koḡbawä’s implied threat that he would defend the visitors with force.”

Appendix 1.2: Example of how attempts to control others are averted in the Semai
tribe

Age is an important source of respect among the Semai. However, the system of calculating who is an “elder” is highly flexible, giving individuals considerable leeway in deciding whom to respect. Dentan (1979, pp. 66-67) describes how Semai may deal with other group members’ attempts to exert their will:

“A Semai takes heed of what his elders say. In the Semai phrase, he “hears” them. He does not interrupt when they are speaking ... On the other hand, after listening respectfully to them, he may reject their advice. If they press the point, he may say, “I don’t hear you.” Although a senior may have great influence over some of his juniors, he cannot order them to do anything they do not want to do.”

Appendix 2.1: Vignettes Used in Study 2.1

Low Dominance & Low Prestige

English Translation

Tom† is a second year student and has been actively involved in his student association since the beginning of his studies. Tom has a tendency to occupy positions of high status without being held in high regard by his peers and without taking the positions by force. He is not commanding or particularly notable in either formal or informal social circumstances. Every movement he makes and every word he says lacks authority and distinction. Tom prefers cooperating or convincing over direct competition. When his plans are thwarted in some way, he will usually give in and let others have their way.

This year, Tom requested and was granted a nomination to become the president of his student association. When asked to speak with regard to the nomination, he sat for periods of time and sometimes got up to ensure that everyone could hear him and see him. Tom spoke without much emotion or confidence. He simply reminded all the members that he would be a third year student next year, always punctually attended meetings, participated in important decisions, and in important activities.

Tom suspected that he had a competitor, but was unwilling to dominate or put pressure on the situation. Furthermore he was unwilling to act dominating or presumptuous toward a competitor or his peers. Tom briefly spoke of his many positive attributes, successes and accomplishments across many areas of his life. While he spoke, some of his peers remained attentive and others appeared uninterested.

Tom was pleased when his fellow members elected him president and promised to continue to actively contribute to the student association. Consistent with many other of his other experiences, Tom found that he could be successful without being pushy or even being admired.

† In the female condition “Tom” was replaced with “Lisa”.

Appendix 2.1 (Continued): Vignettes Used in Study 2.1

Low Dominance & Low Prestige

Original Dutch Version

Tom is een tweedejaars student en is vanaf het begin van zijn studie actief betrokken geweest bij zijn studentenvereniging. Tom heeft de neiging om posities met hoge status te vervullen zonder dat hij in hoge aanzien staat bij medestudenten en zonder de posities met dwang te bemachtigen. Hij is niet gebiedend of bijzonder opvallend in zowel formele als informele sociale situaties. In elke beweging die hij maakt en elk woord dat hij zegt ontbreekt het aan autoriteit en aanzien. Tom geeft de voorkeur aan samenwerking of overtuigen boven directe competitie. Als hij op enige wijze gedwarsboomd wordt, zal Tom meestal inbinden en anderen hun zin geven.

Dit jaar heeft Tom een verzoek ingediend en toegewezen gekregen om voorzitter van zijn vereniging te worden. Toen hem gevraagd werd om het woord te nemen met betrekking tot de voordracht, bleef hij een deel van de tijd zitten en stond hij soms op om te zorgen dat iedereen hem kon zien en horen. Tom sprak zonder veel emotie of zelfvertrouwen. Hij herinnerde de leden van de studentenvereniging er simpelweg aan dat hij volgend jaar derdejaars zou worden, stipt aanwezig was bij vergaderingen, en deelnam aan belangrijke beslissingen en aan belangrijke activiteiten.

Tom vermoedde dat hij een concurrent had maar was niet bereid om de situatie te domineren of onder druk te zetten. Bovendien was hij niet bereid om zich overheersend of aanmatigend te gedragen tegenover een concurrent of zijn verenigingsgenoten. Tom sprak kort over zijn vele positieve eigenschappen, successen en verdiensten in veel verschillende domeinen van zijn leven. Terwijl hij sprak, bleven sommige verenigingsleden aandachtig luisteren en maakten anderen een ongeïnteresseerde indruk.

Tom voelde zich voldaan toen zijn verenigingsgenoten hem tot voorzitter verkozen en beloofde bereid te blijven om actief bij te dragen aan de vereniging. In lijn met veel van zijn andere ervaringen, was het Tom duidelijk dat hij succesvol kon zijn zonder dwingend te zijn of zelfs maar bewonderd te worden.

Appendix 2.1 (Continued): Vignettes Used in Study 2.1

High Dominance & Low Prestige

English Translation

Tom is a second-year student and has been actively involved in his student association since the beginning of his studies. Tom, with his commanding and powerful presence, has a tendency to control and take the lead in every situation. He is direct and presumptuous in both formal and informal social circumstances. Every movement he makes communicates dominance and authority. He is very competitive, refusing to yield to any opponent or challenger who questions his leadership. When his plans are thwarted, Tom will coerce any competitor with a show of oppressive determination, which usually results in the competitor giving in.

This year Tom was determined to become the president of his student association and was willing to take anyone on who stood in his way. When the time came that he nominated himself, Tom rose and paced while he spoke and was emotional at times when expressing why he should be elected president.

He suspected there were rivals for the position and expressed a subtle threat to any possible competitors. He reminded the members of the student association that he had frequently led meetings, taken important decisions, and taken a leading role in important activities. Tom went on to remind them of his many positive qualities, successes and accomplishments across many areas of his life. When Tom spoke forcefully, his peers avoided eye contact and slouched in their seats.

When Tom's peers called for further nominations, it was clear that they didn't regard him highly and were not ready to hand over the leadership to him. Tom resolved to defeat his competition and pressure his peers until he was sure he would be elected. Despite the overall low regard of his peers for him, Tom was elected president of his student association as a result of his characteristic dominance and pressure he subjected his peers to. Consistent with many other of Tom's experiences, it was clear to him that he could get his way by oppressing and dominating challengers to his desire to have the lead.

Appendix 2.1 (Continued): Vignettes Used in Study 2.1

High Dominance & Low Prestige

Original Dutch Version

Tom is een tweedejaars student en is vanaf het begin van zijn studie actief betrokken geweest bij zijn studentenvereniging. Tom, met zijn gebiedende en krachtige aanwezigheid, heeft de neiging om het voortouw te nemen en de leiding naar zich toe te trekken in elke situatie. Hij is direct en aanmatigend in zowel formele als informele sociale situaties. Uit elke beweging die hij maakt spreekt dominantie en autoriteit. Hij is zeer competitief, niet bereid om toe te geven aan enig opponent of tegenstander die zijn leiderschap in twijfel trekt. Als hij gedwarsboemd wordt, zal Tom zijn tegenstander overbluffen door blijkt te geven van een dwingende vastberadenheid, wat er meestal toe leidt dat zijn opponent toegeeft.

Dit jaar is Tom vastbesloten om voorzitter van zijn vereniging te worden, en hij is bereid om het tegen iedereen op te nemen die hem in de weg staat. Toen het moment daar was dat hij zich beschikbaar stelde, stond Tom op, liep hij heen en weer terwijl hij sprak, en was hij bij tijden emotioneel toen hij verwoorde waarom hij vond dat hij tot voorzitter gekozen zou moeten worden.

Hij vermoedde dat er mededingers waren voor de positie en hij uitte een subtiele dreiging aan het adres van mogelijke concurrenten. Hij herinnerde de leden van de studentenvereniging eraan dat hij vaak vergaderingen had geleid, belangrijke beslissingen had genomen, en belangrijke activiteiten had aangestuurd. Tom vervolgde door ze te herinneren aan zijn vele positieve eigenschappen, successen en verdiensten in veel verschillende domeinen van zijn leven. Op het moment dat Tom op dwingende wijze sprak, vermeden zijn verenigingsgenoten het om oogcontact met hem te maken en zakten ze weg in hun stoelen.

Het was duidelijk dat Tom's verenigingsgenoten hem niet hoog achtten en er niet klaar voor waren om het leiderschap aan hem over te dragen toen ze een oproep deden aan andere kandidaten. Tom besloot om de concurrentie te verslaan en zijn verenigingsleden onder druk te zetten tot hij er zeker van was dat hij verkozen zou worden. Ondanks de algemene lage waardering van zijn verenigingsgenoten voor hem, werd Tom verkozen tot voorzitter van zijn vereniging, door de voor hem kenmerkende dominantie en dwang die hij uitoefende over leden van zijn vereniging. In lijn met veel andere ervaringen van Tom, was het duidelijk dat hij zijn zin kon krijgen door tegenstanders van zijn verlangen om de leiding te hebben te onderdrukken en te overheersen.

Appendix 2.1 (Continued): Vignettes Used in Study 2.1

Low Dominance & High Prestige

English Translation

Tom is a second year student and has been actively involved in his student association since the beginning of his studies. Tom, with his striking and distinctive presence, has a tendency to place himself in a prominent position in every situation. He is direct and thorough in both formal and informal social circumstances. Every movement he makes and every word he says communicates dignity, credibility, and honour. Tom prefers cooperating or convincing over direct competition. When his plans are thwarted, Tom will usually give in and allow others to have their way – especially when someone resists his attempts to convince them.

Tom was happy and willing to accept a nomination to become the president of his student association this year. It came as no surprise, because his peers had often asked him to organize meetings, take important decisions, and take a leading role in important activities. When asked to speak with regard to the nomination, he remained seated and began to speak in a relaxed and confident manner.

Tom suspected that he had a competitor, but was unwilling to attempt to dominate or put pressure on the situation. Furthermore he was unwilling to act dominating or presumptuous toward a competitor or his peers. Tom briefly spoke of his many positive qualities, successes and accomplishments across many areas of his life. While he spoke, his peers sat upright, made good eye-contact and listened intently until he finished speaking.

Tom was pleased when his fellow members told him that they had already unanimously decided among themselves to elect him president. Furthermore, they emphasized that this decision was based on Tom's consistent successes and frequent accomplishments. Consistent with many other of Tom's experiences, it was clear to him that his peers admired him and held him in high regard.

Appendix 2.1 (Continued): Vignettes Used in Study 2.1

Low Dominance & High Prestige

Original Dutch Version

Tom is een tweedejaars student en is vanaf het begin van zijn studie actief betrokken geweest bij zijn studentenvereniging. Tom, met zijn opvallende en kenmerkende aanwezigheid, heeft de neiging om een vooraanstaande plek in te nemen in elke situatie. Hij is direct en gedegen in zowel formele als informele sociale situaties. Uit elke beweging die hij maakt en elk woord dat hij zegt spreekt waardigheid, geloofwaardigheid en eer. Tom geeft de voorkeur aan samenwerking of overtuigen boven directe competitie. Als hij op enige wijze gedwarsboemd wordt, zal Tom meestal inbinden en anderen hun zin geven – vooral als iemand weerstand biedt aan zijn pogingen tot overtuigen.

Tom was blij en dienstwillig om voorgedragen te worden om dit jaar voorzitter van zijn vereniging te worden. Het kwam niet als een verassing want zijn verenigingsgenoten hadden hem vaak gevraagd hadden om vergaderingen te organiseren, belangrijke beslissingen te leiden, en belangrijke activiteiten aan te sturen. Toen hem gevraagd werd om het woord te nemen met betrekking tot de voordracht, bleef hij zitten en begon hij op ontspannen en vol zelfvertrouwen te spreken.

Tom vermoedde dat hij een concurrent had maar was niet bereid om de situatie te domineren of onder druk te zetten. Bovendien was hij niet bereid om zich overheersend of aanmatigend te gedragen tegenover een concurrent of zijn verenigingsgenoten. Tom sprak kort over zijn vele positieve eigenschappen, successen en verdiensten in veel verschillende domeinen van zijn leven. Tewijl hij sprak zaten zijn verenigingsgenoten rechtop, maakten ze goed oogcontact en luisterden ze intens tot hij klaar was met spreken.

Tom voelde zich voldaan toen zijn verenigingsgenoten hem vertelden dat ze onderling al unaniem besloten hadden om hem tot voorzitter te kiezen. Ze onderstreepten verder nog dat dit besluit gebaseerd was op Tom's niet aflatende successen en frequente prestaties. In lijn met veel andere ervaringen van Tom, was het hem duidelijk dat zijn verenigingsgenoten hem bewonderden en in hoge aanzien hielden.

Appendix 2.1 (Continued): Vignettes Used in Study 2.1

High Dominance & High Prestige

English Translation

Tom is a second year student and has been actively involved in his student association since the beginning of his studies. Tom, with his striking and powerful presence, has a tendency to control and take the lead in every situation. He is direct and thorough in both formal and informal social circumstances. Every movement he makes communicates dignity, dominance, reputability, and authority. When his plans are thwarted, Tom will coerce any competitor with a show of oppressive determination, which usually results in the competitor giving in.

This year, Tom was determined to become the president of his student association and was willing to take anyone on who stood in his way. When the time came that he nominated himself, Tom rose and paced while he spoke and was emotional at times when expressing why he should be elected president. He reminded the members of the student association that they had frequently asked him to organize meetings, take important decisions, and take a leading role in important activities. Tom went on to remind them of his many positive qualities, successes and accomplishments across many areas of his life.

When Tom spoke forcefully, his peers avoided eye contact and slouched in their seats. However, Tom began to suspect that he was not going to encounter any opposition, so he sat and began to speak in a relaxed and confident manner. At this time, Tom's peers sat upright, made good eye contact and listened intently until he finished speaking.

Tom was pleased when his fellow members told him that they had already unanimously decided among themselves to elect him president. Furthermore, they emphasized that this decision was based on Tom's consistent successes and frequent accomplishments. Consistent with many other of Tom's experiences, it was clear to him that his peers admired him, held him in high regard, and were unwilling to challenge his desire to lead them.

Appendix 2.1 (Continued): Vignettes Used in Study 2.1

High Dominance & High Prestige

Original Dutch Version

Tom is een tweedejaars student en is vanaf het begin van zijn studie actief betrokken geweest bij zijn studentenvereniging. Tom, met zijn opvallende en krachtige aanwezigheid, heeft de neiging om het voortouw te nemen en de leiding naar zich toe te trekken in elke situatie. Hij is direct en gedegen in zowel formele als informele sociale situaties. Uit elke beweging die hij maakt spreekt waardigheid, dominantie, gerenommeerdheid, en autoriteit. Als hij gedwarsboomd wordt, zal Tom zijn tegenstander overbluffen door blijkt te geven van een dwingende vastberadenheid, wat er meestal toe leidt dat zijn opponent toegeeft.

Dit jaar was Tom vastbesloten om voorzitter van zijn vereniging te worden, en hij was bereid om het tegen iedereen op te nemen die hem in de weg stond. Toen het moment daar was dat hij zich beschikbaar stelde, stond Tom op, liep hij heen en weer terwijl hij sprak en was hij bij tijden emotioneel toen hij verwoorde waarom hij vond dat hij tot voorzitter gekozen zou moeten worden. Hij herinnerde de leden van de studentenvereniging eraan dat ze hem vaak gevraagd hadden om vergaderingen te organiseren, belangrijke beslissingen te nemen, en belangrijke activiteiten aan te sturen. Tom vervolgde door ze te herinneren aan zijn vele positieve eigenschappen, successen en verdiensten in veel verschillende domeinen van zijn leven.

Op het moment dat Tom op dwingende wijze sprak, vermeden zijn verenigingsgenoten het om oogcontact met hem te maken en zakten ze weg in hun stoelen. Maar Tom begon te vermoeden dat hij geen tegenstand zou ondervinden, dus ging hij zitten en begon op meer ontspannen en zelfverzekerde wijze te spreken. Nu gingen de verenigingsgenoten van Tom rechttop zitten, maakten ze oogcontact en luisterden ze intens tot hij klaar was met spreken.

Tom voelde zich voldaan toen zijn verenigingsgenoten hem vertelden dat ze onderling al unaniem besloten hadden om hem tot voorzitter te kiezen. Ze onderstreepten verder nog dat dit besluit gebaseerd was op Tom's niet aflatende successen en frequente prestaties. In lijn met veel andere ervaringen van Tom, was het hem duidelijk dat zijn verenigingsgenoten hem bewonderden en in hoge aanzien hielden, en dat ze niet bereid waren om zijn wens om de leiding over ze te nemen aan te vechten.

Appendix 3.1: Pre-test A3.1 Perceptions of Agentic Behaviour

Thirty-three participants (16 females, 17 males; $M_{\text{age}} = 21.94$, $SD = 4.48$) were recruited on Campus at Tilburg University and assigned to one of two Behaviour Type conditions (Agentic Behaviour: low, high) of a paper-and-pencil pre-test.

Participants read a description of a person named “Kim” (a Dutch gender-neutral name). Depending on condition the description consisted of eight high agency behaviours or eight low agency behaviours obtained from the associated scales of the Social Behaviour Inventory (SBI; Moskowitz, 1994; full list is included in Table A3.1). After reading the description, participants rated their perception of Kim on two items (*persuasive* and *intimidating*) on scales running from *not at all* (-3) to *very much* (3).

T-tests confirmed that targets described in terms of High Agency behaviour were seen as more *persuasive* ($M = 1.69$) than targets described in terms of Low Agency behaviour ($M = -2.06$), $t(31) = 7.82$, $p < .001$, and as more *intimidating* ($M = 1.25$) than those described in terms of Low Agency behaviour ($M = -2.29$), $F(31) = 9.42$, $p < .001$.

Table A3.1: Behaviour Type Manipulation Materials for Pre-test A3.1

Low Agentic Behaviour

English Translation

- Kim waits until others say or do something first.
- Kim easily gives in to others.
- Kim speaks softly.
- Kim only speaks when others ask something.
- Kim prefers to keep an own opinion to themselves.
- Kim is someone who doesn't always voice a disagreement with something.
- Kim prefers to let others make plans or take decisions.
- Kim doesn't state own wishes directly.

Original Dutch Version

- Kim wacht af tot anderen eerst iets zeggen of doen.
- Kim geeft gemakkelijk toe aan anderen.
- Kim spreekt zachtjes.
- Kim praat alleen als anderen iets vragen.
- Kim houdt een eigen mening liever voor zich.
- Kim is iemand die niet altijd zegt het ergens niet mee eens te zijn.
- Kim laat het liever aan anderen over laat om plannen te maken of beslissingen te nemen.
- Kim zegt niet rechtstreek iets te willen.

Table A3.1 (Continued): Behaviour Type Manipulation Materials for Pre-test

A3.1

High Agentic Behaviour

English Translation

- Kim sets goals for themselves and others.
- Kim takes the lead in planning and organizing projects or activities.
- Kim speaks with a clear and resolute voice.
- Kim provides information.
- Kim isn't afraid to give an opinion.
- Kim asks for volunteers.
- Kim immediately gets to the point.
- Kim asks others to do things.

Original Dutch Version

- Kim stelt doelen voor zichzelf en anderen
- Kim neemt de leiding in het plannen en organiseren van projecten of activiteiten
- Kim spreekt met een heldere ferme stem
- Kim geeft informatie
- Kim is niet bang is om een mening te geven
- Kim vraagt om vrijwilligers
- Kim komt onmiddellijk ter zake
- Kim vraagt anderen om dingen te doen.

Appendix 3.2: Pre-test A3.2 Perceptions of Communal Behaviour

Thirty-two more participants (16 females, 16 males; $M_{\text{age}} = 22.87$, $SD = 5.07$) were recruited on Campus at Tilburg University and assigned to one of two Behaviour Type conditions (Communal Behaviour: low, high) of a paper-and-pencil pre-test.

Depending on condition, participants read a description of a person named Kim consisting of eight High Communal behaviours or eight Low Communal behaviours obtained from the associated scales of the SBI (Moskowitz, 1994; full list included in Table A3.2). After reading the description, participants rated their perception of Kim on two items (*respectful* and *accommodating*) on scales running from *not at all* (-3) to *very much* (3).

T-tests confirmed that targets described in terms of High Communal behaviour were seen as more *respectful* ($M = 2.50$) than targets described in terms of Low Communal behaviour ($M = -1.31$), $t(30) = 8.96$, $p < .001$, and as more *accommodating* ($M = 1.69$) than those described in terms of Low Communal behaviour ($M = -1.19$), $t(30) = 6.18$, $p < .001$.

Table A3.2: Behaviour Type Manipulation Materials for Pre-test A3.2

Low Communal Behaviour

English Translation

- Kim doesn't always react to questions and comments of others.
- Kim sometimes makes sarcastic remarks.
- Kim sometimes provides false information.
- Kim discredits what others say.
- Kim sometimes speaks with a strongly raised voice.
- Kim contradicts what others say.
- Kim confronts others when they disagree about something.
- Kim demands that others do what Kim wants.

Original Dutch Version

- Kim reageert niet altijd op de vragen en opmerkingen van anderen.
- Kim maakt soms sarcastische opmerkingen.
- Kim geeft weleens onjuiste informatie.
- Kim brengt wat anderen zeggen in diskrediet.
- Kim verheft soms luidkeels de stem.
- Kim weerspreekt wat anderen zeggen.
- Kim gaat de confrontatie aan met anderen als ze het ergens niet over eens zijn.
- Kim eist van anderen dat ze doen wat Kim wil.

Table A3.2 (Continued): Behaviour Type Manipulation Materials for Pre-test A3.2

High Communal Behaviour

English Translation

- Kim listens attentively to others.
- Kim shows sympathy.
- Kim compliments or praises others.
- Kim says positive things about other people who are not present.
- Kim is prepared to compromise about decisions.
- Kim points out to others where there is agreement.
- Kim laughs and smiles with others.
- Kim exchanges pleasantries.

Original Dutch Version

- Kim luistert aandachtig naar anderen
- Kim toont sympathie
- Kim complimenteert of prijst anderen
- Kim zegt positieve dingen over mensen die er niet bij zijn
- Kim is bereid om compromissen te sluiten over beslissingen
- Kim wijst anderen erop waar er overeenstemming is
- Kim lacht en glimlacht vaak met anderen
- Kim wisselt beleefheden uit

Appendix 3.3: Group Hierarchy Type Manipulation Materials for Study 3.2

Dominance-based

English Translation

Assertiveness reigns at Vincentus

Research by bureau Youth and Well-Being in Utrecht has shown that competitive students are highly successful within student associations and social societies at Dutch Universities. The individualistic atmosphere seems to benefit assertive careerists. Our reporter discussed this with members of social society “Vincentus” in Enschede. “In our society dominant personalities claim a leading role for themselves. Their forceful behaviour withholds fellow students from challenging them.”

“Vincentus has set the stage for a power struggle between dominant personalities in which the most coercive students call the shots. Students who are not prepared to predominate or put pressure on others are disregarded. The most powerful students simply apply coercion and exert pressure on them until they give in. Consequently interactions are characterized by harsh competition. Aggressive determination is imperative in order to exercise influence. Therefore, members soon learn that you need to stand up for yourself, and that you can achieve something by suppressing and dominating others.” #

Original Dutch Version

Op Vincentus heerst assertiviteit

Uit onderzoek van het bureau Jeugd en Welzijn in Utrecht is gebleken dat competitief ingestelde studenten veel aanzien hebben binnen studentenverenigingen en disputen van Nederlandse universiteiten. De individualistische sfeer zou assertieve strebers in de kaart spelen. Onze verslaggever sprak hierover met leden van het dispuut “Vincentus” in Enschede. “In ons dispuut eisen krachtige persoonlijkheden een leidende rol op. Hun dwingende gedrag weerhoudt medestudenten ervan om tegen hen in te gaan.”

“Vincentus heeft zich ontwikkeld tot een toneel voor een machtsstrijd tussen krachtige persoonlijkheden waarin degene die de meeste dwang uitoefent het voor het zeggen heeft. Studenten die niet bereid zijn om de boventoon te voeren of anderen onder druk te zetten hebben het nakijken. De machtigste studenten overbluffen ze simpelweg en oefenen druk op ze uit tot ze inbinden. Het gevolg is dat de omgangsvormen gekenmerkt worden door keiharde competitie. Agressieve vastberadenheid is van belang om invloed uit te kunnen oefenen. Leden leren daarom al gauw dat je voor jezelf op moet komen en dat je iets bereikt door anderen te onderdrukken en overheersen.” #

Appendix 3.3 (Continued): Group Hierarchy Type Manipulation for Study 3.2

Prestige-based

English Translation

Appreciation reigns at Vincentus

Research by bureau Youth and Well-Being in Utrecht has shown that cooperative students are highly successful within student associations and social societies at Dutch Universities. The democratic atmosphere seems to benefit trustworthy mediators. Our reporter discussed this with members of social society “Vincentus” in Enschede. “In our society reliable and credible personalities are given a leading role. Sincere appreciation withholds fellow students from challenging them.”

“Vincentus has set the stage for a democratic process in which those who enjoy the trust of fellow students call the shots. Students who try to dominate the situation or suppress others are disregarded. Fellow students simply give their support and trust only to students they genuinely appreciate and respect. Consequently interactions are characterized by mutual respect. Convincing others is essential to exercise influence. Therefore, members soon learn to be considerate towards others, and that you can achieve something if others respect and trust you.” #

Original Dutch Version

Op Vincentus heerst waardering

Uit onderzoek van het bureau Jeugd en Welzijn in Utrecht is gebleken dat coöperatief ingestelde studenten veel aanzien hebben binnen studentenverenigingen en dispuuten van Nederlandse universiteiten. De democratische sfeer zou betrouwbare bruggenbouwers in de kaart spelen. Onze verslaggever sprak hierover met leden van het dispuut “Vincentus” in Enschede. “In ons dispuut wordt aan gedegen en geloofwaardige persoonlijkheden een leidende rol toebedeeld. Oprechte waardering weerhoudt medestudenten ervan om tegen hun in te gaan.”

“Vincentus heeft zich ontwikkeld tot een toneel voor een democratisch proces waarin degene die het vertrouwen geniet van medestudenten het voor het zeggen heeft. Studenten die proberen om de situatie te domineren of onder druk te zetten hebben het nakijken. Medestudenten geven hun steun en vertrouwen simpelweg alleen aan die studenten die ze oprecht waarderen en respecteren. Het gevolg is dat de omgangsvormen gekenmerkt worden door onderling respect. Het meekrijgen van anderen is van belang om invloed uit te kunnen oefenen. Leden leren daarom al gauw om rekening te houden met anderen en dat je iets bereikt als anderen je waarderen en vertrouwen.” #

Appendix 3.4: Behaviour Type Manipulation Materials for Study 3.2

Low Agentic and Low Communal

English Translation

Kim is someone who prefers to keep an own opinion to themselves and doesn't always voice a disagreement with something. Kim prefers to let others make plans or take decisions and doesn't state directly to want something. Kim also doesn't always react to questions and remarks of others and sometimes makes sarcastic comments. Kim sometimes provides incorrect information and discredits what others say.

Original Dutch Version

Kim is iemand die een eigen mening liever voor zich houdt en het niet altijd zegt het ergens niet mee eens te zijn. Kim laat het liever aan anderen over laat om plannen te maken of beslissingen te nemen en zegt niet rechtstreek iets te willen. Ook reageert Kim niet altijd op de vragen en opmerkingen van anderen en maakt Kim soms sarcastische opmerkingen. Kim geeft weleens onjuiste informatie en brengt wat anderen zeggen in diskrediet.

Low Agentic and High Communal

English Translation

Kim is someone who waits until others say or do something first and who easily gives in to others. Kim speaks softly and only when others ask something. Kim is also prepared to compromise about decisions and points out to others where there is agreement. Kim often laughs and smiles with others and exchanges pleasantries.

Original Dutch Version

Kim is iemand die afwacht tot anderen eerst iets zeggen of doen en die gemakkelijk toegeeft aan anderen. Kim spreekt zachtjes en praat alleen als anderen iets vragen. Ook is Kim bereid om compromissen te sluiten over beslissingen en wijst Kim anderen erop waar er overeenstemming is. Kim lacht en glimlacht vaak met anderen en wisselt beleefheden uit.

Appendix 3.4 (Continued): Behaviour Type Manipulation Materials for Study 3.2

High Agentic and High Communal

English Translation

Kim is someone who sets goals for themselves and others and often takes the lead in planning and organizing projects or activities. Kim speaks with a clear firm voice and provides information. Kim also listens attentively to others and shows sympathy. Kim compliments or praises others and says positive things about people who are not present.

Original Dutch Version

Kim is iemand die doelen stelt voor zichzelf en anderen en vaak de leiding neemt in het plannen en organiseren van projecten of activiteiten. Kim spreekt met een heldere ferme stem en geeft informatie. Ook luistert Kim aandachtig naar anderen en toont sympathie. Kim complimenteert of prijst anderen en zegt positieve dingen over mensen die er niet bij zijn.

High Agentic and Low Communal

English Translation

Kim is someone who isn't afraid to give an opinion or ask for volunteers. Kim usually gets to the point immediately and asks others to do things. Kim sometimes speaks with a loudly raised voice and contradicts what others say. Kim confronts others when they disagree about something and demands that they do what Kim wants.

Original Dutch Version

Kim is iemand die niet bang is om een mening te geven of om vrijwilligers te vragen. Kim komt meestal onmiddellijk ter zake en vraagt anderen om dingen te doen. Kim verheft soms luidkeels de stem en weerspreekt wat anderen zeggen. Kim gaat de confrontatie aan met anderen als ze het ergens niet over eens zijn en eist van anderen dat ze doen wat Kim wil.

Appendix 4.1: Pre-test A4.1 Meeting or Exceeding Standards

My theoretical analysis of the Rosenberg Self-Esteem Scale (RSES, Rosenberg, 1965), the scale most commonly used to measure self-esteem, and the 40-item Narcissistic Personality Inventory (NPI-40, Raskin & Terry, 1988), the scale most commonly used to measure narcissism, suggested that the former primarily measures the extent to which people perceive themselves as *meeting* standards whereas the latter primarily measures the extent to which people perceive themselves as *exceeding* standards. I subjected this theoretical conclusion to empirical testing in a short pre-test.

Participants.

Participants ($M = 32$; 12 males, 20 females) were recruited via M-Turk for an online study. They ranged in age from 18 to 58 ($M = 33.88$, $SD = 12.14$) and predominantly had the American nationality (78.2%). All participants classed their English speaking ability as at least “good”, while the vast majority even classed it as “perfect” (90.6%).

Procedure.

I provided detailed instructions of the task. To explain the difference between meeting and exceeding standards they were told that “to meet a standard, you do *just enough* to reach a desired target” and “to exceed a standard, you do enough to reach a desired target, but also do *more in addition*”. They then read an example that further illustrated this distinction.

Following the instructions they were given a complete list of the items from the RSES (see Table A4.1), the narcissistic items from the NPI-40 (see Table A4.2) and the non-narcissistic items (see Table A4.3) from the NPI-40. They rated each of these items on a scale ranging from *All about meeting standards* (1) to *All about exceeding standards* (5).

Results.

I first computed average scores across 1) the self-esteem items from the RSES ($\alpha = .55$), 2) the narcissistic items from the NPI-40 ($\alpha = .94$), and 3) the *non*-narcissistic items from the NPI-40 ($\alpha = .90$) (see Tables A4.1, A4.2, and A4.3 for descriptive statistics). Subjecting these average scores to pairwise independent sample *t*-tests supported the hypothesis. First, participants perceived the narcissistic items from the NPI-40 to reflect exceeding standards as opposed to meeting standards *more* (or meeting standards as opposed to exceeding standards *less*) than the items from the RSES, $t(28) = 3.96$, $p < .001$. Secondly, the narcissistic items from the NPI-40 were also perceived to reflect exceeding standards as opposed to than exceeding standards *more* than the *non*-narcissistic items from the NPI-40, $t(27) = 2.50$, $p = .019$. In contrast, the items from the RSES were *not* perceived to reflect

exceeding standards rather than exceeding standards more or less than the *non-narcissistic* items from the NPI-40, $t(27) = -1.23, p = .228$.

Table A4.1

Pre-test A4.1: Mean (standard deviation) ratings of items on the RSES

Item	<i>M</i>	<i>SD</i>
RSES		
I feel that I'm a person of worth, at least on an equal plane with others	2.72	1.65
I feel that I have a number of good qualities	3.25	1.32
All in all, I am inclined to feel that I am a failure	2.56	1.01
I am able to do things as well as most other people	2.59	1.56
I feel I do not have much to be proud of	2.37	1.04
I take a positive attitude toward myself	3.50	1.24
On the whole, I am satisfied with myself	3.00	1.44
I wish I could have more respect for myself	2.47	1.30
I certainly feel useless at times	2.22	1.07
At times I think I am no good at all	2.38	1.13
Average across items	2.71	.57

Note. $N = 32$. Scale values ranged from *All about meeting standards* (1) to *All about exceeding standards* (5).

Table A4.2

Pre-test A4.1: Mean (standard deviation) ratings of narcissistic items on the NPI-40

Item	<i>M</i>	<i>SD</i>
I have a natural talent for influencing people.	3.48	1.30
Modesty doesn't become me.	3.00	1.10
I would do almost anything on a dare.	2.90	1.26
I know that I am a good person because everyone keeps telling me so.	3.21	1.26
If I ruled the world it would be a better place.	4.17	1.00
I can usually talk my way out of anything.	3.69	1.17
I like to be the centre of attention.	3.31	1.29
I will be a success.	3.97	1.24
I think that I am a special person.	3.93	1.10
I see myself as a good leader.	3.69	1.34
I am assertive.	3.14	1.36
I like having the authority over other people.	3.29	1.24
I find it easy to manipulate people.	3.26	1.13
I insist upon getting the respect that is due to me.	3.07	1.33
I like to show off my body.	3.03	1.32
I can read people like a book.	3.55	.99
I like to take responsibility for making decisions.	3.00	1.28
I want to amount to something in the eyes of the world.	3.66	1.45
I like to look at my body.	2.93	1.16
I will usually show off if I get a chance.	3.41	1.43
I always know what I am doing.	3.31	1.31
I rarely depend on anyone else to get things done.	3.28	1.22
Everybody likes to hear my stories.	3.31	1.07
I expect a great deal from other people.	3.59	1.35
I will never be satisfied until I get all that I deserve.	3.34	1.59
I like to be complimented.	3.14	1.38
I have a strong will to power.	3.69	1.26
I like to start new fads and fashions.	3.48	1.21
I like to look at myself in the mirror.	3.21	1.24
I really like to be the centre of attention.	3.24	1.38
I can live my life anyway I want to.	3.24	1.19

People always seem to recognize my authority.	3.24	1.22
---	------	------

Table A4.2 (Continued)

Pre-test A4.1: Mean (standard deviation) ratings of narcissistic items on the NPI-40

I would prefer to be a leader.	3.28	1.39
I am going to be a great person.	3.52	1.41
I can make anybody believe anything I want them to.	3.24	1.30
I am a born leader.	3.45	1.33
I wish someone would someday write my biography.	3.28	1.56
I get upset when people don't notice how I look when I go out in public.	2.59	1.30
I am more capable than other people.	3.90	1.26
I am an extraordinary person.	4.21	1.08
Average across <i>narcissistic</i> items of the NPI-40	3.38	.72

Note. $N = 32$. Scale values ranged from *All about meeting standards* (1) to *All about exceeding standards* (5).

Table A4.3

Pre-test A4.1: Mean (standard deviation) ratings of non-narcissistic items on the NPI-40

Item	<i>M</i>	<i>SD</i>
I am not good at influencing people.	2.61	1.13
I am essentially a modest person.	2.89	1.29
I tend to be a fairly cautious person.	3.00	1.36
When people compliment me I sometimes get embarrassed.	2.64	.87
The thought of ruling the world frightens the hell out of me.	3.14	1.30
I try to accept the consequences of my behaviour.	3.07	1.36
I prefer to blend in with the crowd.	2.36	1.28
I am not too concerned about success.	2.14	1.04
I am no better or no worse than most people.	2.36	1.34
I am not sure if I would make a good leader.	2.50	1.07
I wish I were more assertive.	2.93	1.09
I don't mind following orders.	2.29	1.05
I don't like it when I find myself manipulating people.	2.64	1.16
I usually get the respect that I deserve.	2.79	1.37
I don't particularly like to show off my body.	3.04	1.00
People are sometimes hard to understand.	2.79	.96
If I feel competent I am willing to take responsibility for making decisions.	2.96	1.45
I just want to be reasonably happy.	2.82	1.66
My body is nothing special.	2.61	1.10
I try not to be a show-off.	2.79	1.20
Sometimes I am not sure what I am doing.	2.36	1.03
I sometimes depend on people to get things done.	2.89	1.20
Sometimes I tell good stories.	3.00	1.12
I like to do things for other people.	3.25	1.08
I take my satisfactions as they come.	2.93	1.33
Compliments embarrass me.	2.75	.75
Power for its own sake doesn't interest me.	3.25	1.18
I don't very much care about new fads and fashions.	2.86	1.04
I am not particularly interested in looking at myself in the mirror.	3.04	1.11
It makes me uncomfortable to be the centre of attention.	3.00	1.02
People can't always live their lives in terms of what they want.	3.32	1.28

Being an authority doesn't mean that much to me.	2.89	1.23
--	------	------

Table A4.3 (Continued)

Pre-test A4.1: Mean (standard deviation) ratings of non-narcissistic items on the NPI-40

I makes little different to me whether I am a leader or not.	2.61	1.34
I hope I am going to be successful.	3.32	1.44
People sometimes believe what I tell them.	3.29	.90
Leadership is a quality that takes a long time to develop.	3.50	1.11
I don't like people to pry into my life for any reason.	3.04	1.04
I don't mind blending into the crowd when I go out in public.	3.04	1.20
There is a lot that I can learn from other people.	3.14	1.33
I am much like everyone else.	2.54	1.40
Average across <i>non-narcissistic</i> items of the NPI-40	2.86	.54

Note. $N = 32$. Scale values ranged from *All about meeting standards* (1) to *All about exceeding standards* (5).

Appendix 4.2: Vignettes and Response Options with Inter-Rater Alphas and Means obtained in Study P4.1

Vignette/Response option	<i>A</i>	Mean scores			
		DOM	SUB	AGR	QUAR
1. You have been working on a task with two other people for several weeks. You believe that everyone has contributed equally to the task. However, your co-workers claim that you have done less than your fair share. Hence, they ask you to do more in future. What do you do?					
A. Try to understand their point of view and reluctantly agree to do more in future.	.94	3.07	7.43	7.14	2.21
B. Try to understand their point of view but calmly refuse to do more in future.	.69	6.00	4.00	5.29	3.86
C. Resent them for being unfair to you and bitterly agree to do more in future.	.89	4.21	6.50	2.93	4.93
D. Resent them for being unfair to you and resolutely refuse to do more in future.	.96	7.50	2.07	2.36	7.50
<i>Cut-off value</i>		<i>5.94</i>	<i>5.34</i>	<i>4.57</i>	<i>4.95</i>
2. As you are talking at the coffee machine two colleagues angrily discuss the behaviour of a third colleague who is not there. You sometimes find this colleague difficult to get on with. What do you do?					
A. Refrain from expressing your views openly but think of incidents showing the colleague in a positive light.	.94	3.29	7.50	7.36	2.21
B. Actively join the discussion and point out incidents showing the colleague in a positive light.	.95	6.36	3.14	8.07	2.07
C. Refrain from expressing your views openly but think of incidents where the colleague behaved offensively.	.90	3.64	6.50	3.36	5.14
D. Actively join the discussion and point out incidents where the colleague behaved offensively.	.93	7.43	3.29	2.43	7.00
<i>Cut-off value</i>		<i>5.72</i>	<i>5.36</i>	<i>4.70</i>	<i>3.90</i>

Appendix 4.2 (Continued): Vignettes and Response Options with Inter-Rater Alphas
and Means Scores obtained in Study P4.1

Vignette/Response option	α	Mean scores			
		DOM	SUB	AGR	QUAR
3. During a meeting with a group of colleagues, one of them makes an insensitive remark about you. What do you do?					
A. Make allowances for your colleague and say nothing about their remark.	.97	3.00	8.36	7.43	1.71
B. Make allowances for your colleague and gently point out their remark was inappropriate.	.92	6.36	4.64	7.07	2.71
C. Resent your colleague but say nothing about their remark.	.94	2.71	7.64	3.57	5.14
D. Resent your colleague and coldly point out their remark was inappropriate.	.97	7.86	2.57	2.07	7.71
<i>Cut-off value</i>		4.78	5.79	4.61	3.90
4. You and your siblings have decided to buy a present for your grandmother's 85th birthday together. One sibling forcefully makes a suggestion for a gift you doubt your grandmother will be happy with. What do you do?					
A. Appreciate your sibling for making a suggestion and hope there will be better ideas.	.98	2.71	7.93	8.71	1.79
B. Appreciate your sibling for making a suggestion but decisively ask for alternative ideas.	.88	6.79	4.00	7.07	3.57
C. Feel contempt for your sibling for being forceful and hope there will be better ideas.	.90	2.93	7.14	4.00	5.29
D. Feel contempt for your sibling for being forceful and decisively ask for alternative ideas.	.95	8.21	2.50	2.71	7.00
<i>Cut-off value</i>		4.73	5.65	5.40	4.72

Appendix 4.2 (Continued): Vignettes and Response Options with Inter-Rater Alphas and Means Scores obtained in Study P4.1

Vignette/Response option	α	Mean scores			
		DOM	SUB	AGR	QUAR
5. At a school reunion you end up sharing a table with a group of old classmates, whom you didn't particularly like at the time. Their recollections of "the old days" paint an unflattering picture of you. What do you do?					
A. Understand that memories can be innocently biased and quietly wait for them to move on to another topic.	.98	2.50	8.07	8.71	1.86
B. Understand that memories can be innocently biased and calmly change the topic.	.95	6.00	5.36	8.21	2.21
C. Assume they are deliberately being nasty and angrily wait for them to move on to another topic.	.85	3.57	6.36	3.00	5.57
D. Assume they are deliberately being nasty and bitterly change the topic.	.98	7.79	2.14	1.93	7.86
<i>Cut-off value</i>		<i>5.13</i>	<i>6.13</i>	<i>4.09</i>	<i>3.35</i>
6. You have invited two friends to your birthday party who have only recently split-up. As you go to the kitchen for a couple of cold beers you realize they are engaged in a loud and bitter argument. What do you do?					
A. Sympathize with their plight but cautiously refrain from interfering.	.98	2.50	7.79	7.86	1.64
B. Sympathize with their plight, but walk over and calmly suggest they talk things over in private.	.95	6.64	4.57	7.79	2.93
C. Feel annoyed about their behaviour but cautiously refrain from interfering.	.89	2.64	6.57	3.64	5.29
D. Feel annoyed about their behaviour, walk over and sharply suggest they talk things over in private.	.98	8.36	2.57	2.00	8.00
<i>Cut-off value</i>		<i>4.05</i>	<i>5.58</i>	<i>4.54</i>	<i>3.72</i>

Note. $N = 14$. DOM = Dominant behaviour; SUB = Submissive behaviour; AGR = Agreeable behaviour; QUAR = Quarrelsome behaviour. Cronbach alpha was computed for each response options across the four behavioural types and between raters. Cut-off values are 1 standard deviation above the mean rating on a given behaviour of the two response options representing the theoretically opposite behaviours on the same vignette.

Appendix 4.3: Manipulations of Self-Esteem and Narcissism Used in Study 4.3

High Narcissism

1. Please think of a moment in your life when you felt that you stood out from the crowd and were admired by others. Take a couple of minutes to vividly recall the experience and re-live the moment in your mind. Now, write about this experience in the space below. Describe how you looked and felt, what you thought about and what you said and did.
2. Describe how this event made you feel successful and entitled to the attention of others.
3. Now, describe how this event made you feel special.

Low Narcissism

1. Please think of a moment in your life when you felt you were no better or worse than most people and comfortable to blend in with the crowd. Take a couple of minutes to vividly recall the experience and re-live the moment in your mind. Now, write about this experience in the space below. Describe how you looked and felt, what you thought about and what you said and did.
2. Describe how this event made you feel unconcerned about your personal success and happy to do things for other people.
3. Now, describe how this event made you feel humble.

Appendix 4.3 (Continued): Manipulations of Self-Esteem and Narcissism

Used in Study 4.3

High Self-esteem

1. Please think of a moment in your life when you felt comfortable with yourself and secure in your sense of self-worth. Take a couple of minutes to vividly recall the experience and re-live the moment in your mind. Now, write about this experience in the space below. Describe how you felt, what you thought about and what you said and did.
2. Describe how this event made you feel able to deal with challenges.
3. Now, describe how this event made you feel satisfied with who you are.

Low Self-esteem

1. Please think of a moment in your life when you felt like a failure and could not respect yourself. Take a couple of minutes to vividly recall the experience and re-live the moment in your mind. Now, write about this experience in the space below. Describe how you felt, what you thought about and what you said and did.
2. Describe how this event made you feel unable to deal with challenges.
3. Now, describe how this event made you feel unhappy with who you are.

Appendix 4.4: State Measure of Self-Esteem Used in Study 4.3

In the situation I just described...

1. I felt that I had a number of good qualities.
2. I had a positive attitude toward myself.

Appendix 4.5: State Measure of Narcissism Used in Study 4.3

In the situation I just described...

- 1 AI would have preferred to be a leader. (N)
BI made little difference to me whether I was a leader or not.
- 2 AI was not sure if I would make a good leader.
BI saw myself as a good leader. (N)
- 3 AI thought I depended on other people to get things done.
BI thought I was unlikely to depend on anyone else to get things done. (N)
- 4 AI felt more capable than other people. (N)
BI felt there was a lot I could learn from other people.
- 5 AI thought I was much like everybody else.
BI thought I was an extraordinary person. (N)
- 6 A Compliments embarrassed me.
BI liked to be complimented. (N)
- 7 AI tried not to be a show off.
BI would show off if I got a chance. (N)
- 8 AI felt modesty didn't become me. (N)
BI felt I was essentially a modest person.
- 9 AI could read people like a book. (N)
BI felt people were sometimes hard to understand.
- 10 A People might have believed what I told them.
BI could make anybody believe anything I wanted them to. (N)
- 11 AI thought my body was nothing special.
BI liked to look at my body. (N)
- 12 AI liked to look at myself in the mirror. (N)
BI was not particularly interested in looking at myself in the mirror.
- 13 AI felt I would never be satisfied until I got all that I deserved. (N)
BI took my satisfactions as they came.
- 14 AI expected a great deal from other people. (N)
BI liked to do things for other people.

Appendix 5.1: Vignettes Used in Study 5.1 as Hierarchy Type Manipulation

Dominance-Based Hierarchy

English Translation

From “Welcome to Mandante (September 2009)” :

... The possibilities to play a prominent role within Mandante are limited and not everyone is suitable for them. Assertive determination is essential in order to exert influence within Mandante. Winning the support of others is not important as it is not the case that members give their support to the people they sincerely appreciate and respect. Rather, **powerful members exert pressure on others until they give in**. New members quickly learn that they need to stand their ground and apply coercion to others if they want to play an important role within Mandante, and that they do not need to earn respect and trust from others to do so...

Original Dutch Version

Uit “Welkom bij Mandante (September 2009)” :

... Er zijn beperkte mogelijkheden om een prominente rol te vervullen binnen Mandante en dit is dus niet voor iedereen weggelegd. Om invloed uit te oefenen binnen Mandante is assertieve vastberadenheid van essentieel belang. Het meekrijgen van anderen is dat niet. Het is namelijk niet zo dat leden hun steun geven aan degenen die ze oprecht waarderen en respecteren. In tegendeel **machtige leden oefenen druk uit op anderen totdat deze toegeven**. Nieuwe leden leren al snel dat ze op hun strepen moeten staan en anderen moeten overbluffen als ze een belangrijke rol willen spelen binnen Mandante, en dat ze daarvoor niet het respect en vertrouwen van anderen hoeven te winnen...

Appendix 5.1 (Continued): Vignettes Used in Study 5.1 as Hierarchy

Type Manipulation

Prestige-Based Hierarchy

English Translation

From “Welcome to Mandante (September 2009)” :

... The possibilities to play a prominent role within Mandante are limited and not everyone is suitable for them. Winning the support of others is essential in order to exert influence within Mandante. Assertive determination is not important, as it is not the case the powerful members exert pressure on others until they give in. Rather, **members give their support to the people that they sincerely appreciate and respect**. New members quickly learn that they need to earn respect and trust from others if they want to play an important role within Mandante, and that they do not need to stand their ground and apply coercion to others to do so...

Original Dutch Version

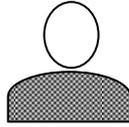
Uit “Welkom bij Mandante (September 2009)” :

... Er zijn beperkte mogelijkheden om een prominente rol te vervullen binnen Mandante en dit is dus niet voor iedereen weggelegd. Om invloed uit te oefenen binnen Mandante is het meekrijgen van anderen van essentieel belang. Assertieve vastberadenheid is dat niet. Het is namelijk niet zo dat machtige leden oefenen druk uit op anderen totdat deze toegeven. In tegendeel **leden geven hun steun aan degenen die ze oprecht waarderen en respecteren**. Nieuwe leden leren al snel dat, als ze een belangrijke rol willen spelen binnen Mandante, ze het respect en vertrouwen van anderen moeten winnen, en ze daarvoor niet op hun strepen hoeven staan en anderen hoeven te overbluffen...

Appendix 5.2: Vignettes Used in Study 5.1 as Status Manipulation

Low Status

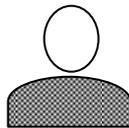
English Translation



Kim

Kim is someone who has little influence within Mandante. Kim does not occupy much of a prominent position within Mandante and is not very noticeably present. When decisions are taken Kim's opinion does not carry a lot of weight.

Original Dutch Version



Kim

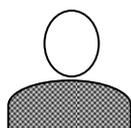
Kim is iemand die weinig invloed heeft binnen Mandante. Kim neemt een weinig opvallende plek in binnen Mandante en is niet heel merkbaar aanwezig. Als er besluiten worden genomen legt de mening van Kim weinig gewicht in de schaal.

Appendix 5.2 (Continued): Vignettes Used in Study 5.1 as Status

Manipulation

High Status

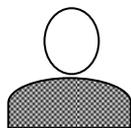
English Translation



Kim

Kim is someone who has a lot of influence within Mandante. Kim occupies a prominent position within Mandante and is noticeably present. When decisions are taken Kim's opinion carries a lot of weight.

Original Dutch Version



Kim

Kim is iemand die veel invloed heeft binnen Mandante. Kim neemt een prominente plek in binnen Mandante en is merkbaar aanwezig. Als er besluiten worden genomen legt de mening van Kim veel gewicht in de schaal.