Status consciousness:

Individual differences in how people think about social status

Beatrice Alba

BA(Hons)/BSc(Hons)

Submitted in fulfilment of the requirements of a degree of Doctor of Philosophy (PhD)

Department of Psychology

Macquarie University

Submitted on the 24th of July 2015

Table of contents

Declaration

This thesis has not been submitted for a degree to any other university or institution. The work presented in this thesis is Beatrice Alba's original work, and the contributions of co-authors have been acknowledged where applicable. This project was approved by the Macquarie University Human Research Ethics Committee on the 3rd of June 2010 (ref: 5201000480D, see Appendix E for the full approval letter).

Beatrice Alba
24th July 2015

Acknowledgments

Thank you to my supervisor Simon Boag, who helped get this thesis over the line. You always went above and beyond to help with my writing, and I'm very grateful for how much you have supported me. Thanks also go to Ladd Wheeler and to the late Doris McIlwain, who also provided supervision on this thesis. Mike Jones provided valuable training and assistance in statistical analysis and, throughout my candidature, has been a boss, a mentor, and a friend – your patience, kindness, and generosity helped me get through many of the challenges of this thesis. My grad school bestie Bernice – you have supported me through some hard times, and I would never have had any fun at all at uni if it weren't for you. We goat this! A big thank you goes to my brother Jules, who always helped me out in all the ways a big brother should. I was really happy to have you in Sydney these last few years.

Finally, I dedicate this thesis to my parents, Michael and Beata Kajtar. They have supported me in every way possible, and given me far more than I deserve. Thank you for being so patient and forgiving through all the stress. You always looked after me and supported me through all these years of study, and I have nothing but love and gratitude for you. I hope I have made you proud. I owe you the world, and now that this thesis is done, I hope I can start to repay a debt that can never possibly be repaid.

Abstract

Status hierarchies are widespread among animal species, and the contests for dominance among our closest living relatives, the chimpanzees, are well documented. In humans, status hierarchies are found throughout the world, across cultures and time. Despite the ubiquity of status hierarchies, there are nonetheless individual differences in attitudes towards hierarchy and status, and the extent to which people are motivated by status goals. The purpose of this thesis is to explore these individual differences in status-relevant attitudes, beliefs, and desires from an evolutionary perspective.

A new measure called the "Status Consciousness Scale" was developed and validated in two studies. The scale has 40 items measuring eight facets of status consciousness: *rejection of status, high-perceived status, respect for hierarchy, low-perceived status, status display, egalitarianism, belief in hierarchy,* and *enjoyment of status*. This scale was administered alongside several existing measures relevant to status, including self-esteem, social dominance orientation, competitiveness, assertiveness, social comparison orientation, overt narcissism, and covert narcissism. The correlations with these measures supported the convergent validity of the Status Consciousness Scale.

An additional two studies attempted to refine and develop two factors from the Status Consciousness Scale, with the intention to explore these constructs in detail in future studies. The *rejection of status* factor in the Status Consciousness Scale appeared to be the converse of the desire for status, which is argued to be a fundamental motive of importance in status-relevant concerns. This study devised a scale measuring the *desire for status*, and also included a measure of *perceived superiority*. The resulting scale from this study included both these factors, with eight items in total. Correlations with striving to avoid inferiority, dominance, prestige, self-esteem, social dominance orientation, competitiveness, assertiveness, social comparison orientation, overt narcissism, and covert narcissism indicated that the Desire for Status Scale had good convergent validity.

Lastly, a qualitative study was conducted to explore laypeople's understanding of the meaning of the term "status". The findings revealed that status is a broad and multi-faceted construct that exists in various forms. This result supported our argument for a broad conceptualisation of the term "status", and implications for the validity of our scale and the definition of status in the literature are discussed.

Chapter 1

Introduction

We find status hierarchies everywhere in life: at school, the workplace, dinner parties, the global political scale, and just about anywhere there is a group of people. The term "status" has been defined in a variety of different ways throughout the literature, particularly by equating it with concepts such as dominance, prestige, and power (Blader & Chen, 2014; Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013). Used broadly, the term "status" can include all these concepts, and be defined as a position of superiority on some socially asymmetric dimension (Henrich & Gil-White, 2001). Status hierarchies can range from those that are formalised in organisations or societies to those that arise spontaneously in newly acquainted groups of people. In any social group or relationship we can often rank ourselves on some measure of status, and different types of status can occur in different contexts. While many of us might prefer to avoid competing for rank in these hierarchies, it is easy to notice that some people seem more determined to climb these hierarchies than others. For example, we have probably all known somebody who always wants to be in charge or be the best at what they do. Others might be happy to accept a more modest status, and perhaps even ignore or avoid hierarchies altogether. The concern with our position in society can lead us to experience "status anxiety", where the worry about where we rank can become an immense source of suffering, particularly in certain cultures and contexts (De Botton, 2005). However, as will be argued, the concern with status is a fundamental human concern, and the result of our evolved nature (Anderson, Hildreth, & Howland, 2015; Barkow, 1989; Buss, 2008a; Cummins, 2006). If status is such a central concern in human life and a part of our evolved nature, then the topic deserves further study. Furthermore, individual differences regarding how people relate to status and status hierarchies is a rich area for psychological investigation, and one in which research has only just begun.

The broad aim of this thesis is to examine these individual differences related to the status domain and to develop means for assessing them. In order to address this broader aim, we aimed to identify a number of psychological constructs relevant to how people relate to status hierarchies and negotiate hierarchical life, and to develop tools to measure individual

differences in these constructs. A further aim was to explore the meaning of the term "status", particularly for the purpose of understanding how status is understood in the minds of the general population as an issue relevant to the measurement of individual differences around status.

The Study of Status in Psychology

A number of key figures in the history of psychology have argued for the importance of status and status-related concepts in human life, as have many sociologists (Berger, Cohen, & Zelditch, 1972; Berger, Rosenholtz, & Zelditch, 1980; Goldhamer & Shils, 1939; Lenski, 1966; Willer, 2009). The psychoanalyst Alfred Adler argued that the striving for superiority underlies our entire psychological being and all of life's problems (Ansbacher & Ansbacher, 1956). He argued that this striving for superiority begins in early childhood and runs through to the end of our lives, and believed that this striving is compensation for feeling inferior. Abraham Maslow included the need for esteem in the eyes of others just beneath self-actualisation in his hierarchy of needs (Maslow, 1943). Other, substantially less-cited, work by Maslow (1937) described dominant status in relationships and "dominance-feeling", which is the high evaluation of oneself compared to others. He also described the craving for dominance, and likened human dominance to the behaviour observed among monkeys and chimpanzees.

More recently, Hogan and Hogan (1991) argued that status-seeking is a biologically-based primary human motive, as have evolutionary psychologists such as David Buss (2008a), who argued that status striving is one of the most likely candidates for a universal human motive. Cummins (1998) argued that status hierarchies are so fundamental to humans, that the cognitive pressures to negotiate them are what led to the evolution of human intelligence. Indeed, status has long been recognised as important by evolutionists (Barkow, 1989; Frank, 1985; Pinker, 1997; Symons, 1979). Maslow's hierarchy of needs has been revised by evolutionary psychologists (Kenrick, Griskevicius, Neuberg, & Schaller, 2010),

who have retained the desire for status and esteem as fundamental human motives. The argument that the desire for status is a fundamental human motive remains on the cutting edge of research in psychology, with a recently published article arguing this very case on the basis of several criteria (Anderson et al., 2015). Anderson et al. (2015) argue that the reasons why the desire for status is fundamental are because high or low status has significant long-term consequences, because we have a variety of mechanisms for pursuing high status, and because the desire for status is both universal and not derivative of any other desire or need, but a goal in and of itself.

Understanding Human Hierarchies via Animal Hierarchies

Status hierarchies are of course not unique to human societies, and in order to properly understand the nature of status in humans, we must understand the nature of hierarchies in their evolutionary context of animal behaviour more generally. The first formal study of dominance hierarchies in vertebrates was by Schjelderup-Ebbe (1922, as cited in Price & Sloman (1987)), who famously studied the pecking order in domestic hens. Since then, ethologists have documented dominance hierarchies throughout the animal world, including goats (F. Fournier & Festa-Bianchet, 1995), cockroaches (Breed, Smith, & Gall, 1980), and pupfish (Itzkowitz, 1977), to name just a few.

Given the ubiquity of dominance hierarchies among animals, the question then arises as to why they are so common. Unsurprisingly, occupying a position of dominance carries survival and reproductive benefits. Dominant animals gain priority access to desirable resources such as food, space, and allies, and are therefore safer from the dangers of starvation and predation (Cheney & Seyfarth, 1990; Cummins, 1998; Davies, Krebs, & West, 2012; Dunbar, 1988; Silk, 1986). Protection from predators and foraging efficiency are some of the reasons why animals live in groups in the first place (Cummins, 1998; Davies et al., 2012; Dunbar, 1988). Dominance also relates to reproductive success, whereby dominant individuals obtain more opportunities to mate and leave behind a greater number of progeny

(Dewsbury, 1982; Ellis, 1995). This is particularly true of males, since they can mate with many females, often with little or no investment in the rearing of offspring. Females, however, are typically more limited in the number of offspring they can produce in their lifetime (Cowlishaw & Dunbar, 1991; Ellis, 1995).

The fact that occupying a position of dominance carries fitness benefits is only part of the answer as to why dominance hierarchies exist, since the existence of dominant individuals who gain priority access to resources clearly has negative implications for non-dominant individuals. The benefits that come from being dominant explain why animals should attempt to occupy a dominant position, but the existence of dominance hierarchies can only be explained by showing how dominant individuals maintain their position over individuals who are willing to accept lower rank in the hierarchy.

Typically the means by which animals gain dominance depend on the outcomes of agonistic encounters, which may involve a fight or the threat of attack. Among animals, fighting is typically ritualised, and these ritual agonistic behaviours signal strength and the capacity to win fights to other animals (Eibl-Eibesfeldt, 1970; Lorenz, 1964; Price & Sloman, 1987). In hens, agonistic behaviour involves pecking at one another until one bird runs away, which subsequently becomes subordinate to the other in future encounters. This ritualised behaviour then establishes a dominance hierarchy (Schjelderup-Ebbe (1935), as cited in Price and Sloman). This original conceptualisation of dominance by Schjelderup-Ebbe has been argued to be the best definition of dominance, whereby the dominant individual is that who has repeatedly received a yielding response from opponents in agonistic encounters (Drews, 1993).

The competition for dominance has the potential to become dangerous if animals were to fight until one or more of them gets injured or killed. Furthermore, regardless of who wins and who loses, fighting is costly in terms of time and energy spent in agonistic encounters, which can be better spent engaging in more immediate survival and reproduction activities (Buss, 2008a; Ellis, 1995). The decision whether to fight or submit depends on the

assessment that animals make of their own and their competitor's fighting ability, which can depend on characteristics such as size and physical strength (Parker, 1974). For those potential combatants that are likely to lose a fight for resources, retreating from an aggressive dispute is the favourable response (Parker, 1974). This yielding behaviour of one animal towards another prevents the escalation of agonistic encounters, and therefore these ritualised behaviours allow animals to prevent costly, and potentially fatal, battles for dominance (Eibl-Eibesfeldt, 1970; Gilbert, Price, & Allan, 1995; Lorenz, 1964). This strategic submission of some individuals towards others explains how dominant individuals maintain their position over subordinate individuals, and thus how dominance hierarchies are established and maintained. While all animals might be driven to pursue dominance, the recognition that the fight for dominance is likely to result in defeat since some individuals are better equipped to succeed in agonistic encounters means that some individuals learn to accept lower rank. Thus even among other animals we observe individual differences in the pursuit of dominance.

We have shown that dominance has fitness payoffs in the animal world, and that while seeking dominance is adaptive, being submissive is also adaptive when a contest for dominance is unlikely to be won. The resulting dominance hierarchy is therefore beneficial for the individuals within it, and research has in fact shown that stable hierarchies lead to more peaceful group functioning through a reduction in aggressive contests for dominance (Eibl-Eibesfeldt, 2007). Despite this, it is important to note the hierarchy itself is not an adaptation, in the sense that hierarchies themselves have evolved to solve an adaptive problem. As Buss (2008a) explains, the hierarchy itself is not functional, but rather it is the dominance and submission strategies that individuals employ that are functional in the evolutionary sense. The hierarchy merely emerges as a result of the aggregate of these behavioural strategies. In order to see how understanding dominance hierarchies in other animals might help us understand the existence of hierarchies in humans, we will now turn to species more closely related to our own.

Dominance Hierarchies in Primates

While dominance hierarchies are found throughout the animal world, they are also found throughout our own order, the primates (Eibl-Eibesfeldt, 2007; Mazur, 1973, 1985; Sapolsky, 2005). Primatologists have documented dominance hierarchies among monkeys (Bernstein, 1976; Cheney & Seyfarth, 1990; Dunbar, 1988), gorillas (Fossey, 1983), and our closest living relatives, the chimpanzees (Goodall, 2000; Pusey, Williams, & Goodall, 1997) and bonobos (Furuichi, 1997). Frans De Waal's studies of captive chimpanzees at the Arnhem Zoo revealed the detailed encounters through which individual chimpanzees rose and fell within the chimp hierarchy (De Waal, 2007). Here De Waal describes the "submissive greeting" given to dominant chimps, which he describes as the most reliable indicator of the hierarchy:

Strictly speaking, a "greeting" is no more than a sequence of short, panting grunts known as pant-grunting. While he utters such sounds the subordinate assumes a position whereby he looks up at the individual he is greeting. In most cases he makes a series of deep bows that are repeated so quickly one after the other that this action is known as bobbing. Sometimes "greeters" bring objects with them (a leaf, a stick), stretch out a hand to their superior, or kiss his feet, neck, or chest. The dominant chimpanzee reacts to this "greeting" by stretching himself up to a greater height and making his hair stand on end. The result is a marked contrast between the two apes, even if they are in reality the same size. The one almost grovels in the dust, the other regally receives the "greeting". Among adult males this giant/dwarf relationship can be accentuated still further by histrionics such as the dominant ape stepping or leaping over the "greeter" (the so-called bluff over). At the same time the submissive ape ducks and puts his arms up to protect his head. (De Waal, 2007, p. 78)

Given that our closest living relatives and many other animals have dominance hierarchies, we should not be surprised to find that much like the rest of the animal world, humans are also a hierarchical species. It is likely that our own tendency to be hierarchical

has its roots deep in our evolutionary past, and did not emerge recently. Furthermore, the importance of status among other animals suggests that if we also have a tendency to be hierarchical, then status might have similar importance in our own species. This variation in the behaviour of other animals in seeking dominance or yielding submissively to dominant animals might also illuminate the existence of individual differences relating to status in humans.

Human Hierarchies

Among humans, dominance hierarchies are found in groups of children even before the age of two (Russon & Waite, 1991). Dominant children receive more attention, are more preferred as playmates by other children, and have greater control over toys (Hawley, 2002). While the dominance behaviour of children often involves agonistic acts such as kicking and pushing, dominant children are found to use prosocial as well as coercive strategies to gain status, particularly as they get older (Hawley, 2002; Strayer & Trudel, 1984). By the middle of adolescence, dominance characteristics become much less associated with influence, and prosocial behaviours are more effective in gaining status (Savin-Williams, 1979, 1980). The existence of hierarchies among even very young children suggests that our tendency to be hierarchical is deeply rooted in our nature.

Psychological research has found that adults are also very much hierarchical, and that status hierarchies form spontaneously and very quickly in groups of people meeting for the first time (Fisek & Ofshe, 1970). One study (Kalma, 1991) found that status hierarchies form on the basis of mere glances before participants have even verbally interacted, suggesting that the formation of hierarchies relies on rapid judgments requiring very little cognitive processing. The fact that hierarchies form so spontaneously in groups also supports the argument that hierarchies are a part of our fundamental nature.

Looking at a larger scale, we find hierarchical societies all over the world, all throughout historical time. Hierarchies with a monarch and an elite ruling class, presiding

over a substantially less-privileged peasantry were found throughout the ancient world (Betzig, 1993). Status hierarchies are also found throughout the world in more traditional small-scale societies, including foraging and horticultural societies (von Rueden, 2014). Even modern democracies involve some centralisation of political power, and socio-economic inequality in some form (Boehm, 1999; Eibl-Eibesfeldt, 2007).

While the hierarchies that occur in large-scale civilisations and many smaller-scale horticultural societies are unlike those that would have occurred in the ancestral environments in which humans evolved, they do reflect our hierarchical nature expressing itself in some form. However, it is the social structures that occur in foraging societies that are likely to most closely resemble the ancestral environments in which humans evolved, and it is among these foraging societies that we often find something rather different. Contrary to the typical hierarchical trend in human societies, anthropologists have found that foraging and tribal societies are in fact often very egalitarian, with no officially appointed leader (Boehm, 1999; Eibl-Eibesfeldt, 2007). However, these societies go to great lengths in order to maintain their egalitarianism and prevent any individuals from dominating the group with a variety of rules, norms, and customs. Boehm et al. (1993) argued that egalitarianism is in fact a form of hierarchy where the weak band together to dominate the strong.

Much like these extant foraging and tribal societies, early human societies prior to the existence of chiefdoms were likely to be relatively egalitarian, where no individual or group of individuals dominated the group (Knauft et al., 1991). This might appear to suggest that human nature is in fact egalitarian rather than hierarchical. However, von Rueden (2014) has recently argued that the egalitarianism of these foraging societies has been overstated by anthropologists such as Boehm (1999), and that hierarchies emerge in all foraging societies despite efforts to reverse them. Even in the absence of official leaders in these societies, some individuals often manage to gain higher status through means such as their possession of skills and knowledge, or social support and coalitions (von Rueden, 2014). Whatever the case may be, even if these egalitarian societies appear to be contrary to the trend by being anti-

hierarchical, Boehm (1999) argued that the fact that these societies have to go to such great lengths and invest so much effort to prevent hierarchies arising suggests that they are going against our nature to be hierarchical. The fact that status hierarchies are found so commonly throughout the world, and as some argue, are a human universal (von Rueden, 2014), suggests that our tendency to be hierarchical is a fundamental part of human nature.

Cultural and Historical Variation in the Nature of Status

While societies can differ in the extent to which they are hierarchical, the basis of status can also differ across societies. In small-scale societies, status often means having political influence over group decisions and a role in conflict resolution, but not the power to control outcomes for others (Henrich & Gil-White, 2001; von Rueden, 2014). In some chiefdoms, material wealth is an indicator of status, flaunted through conspicuous consumption (Eibl-Eibesfeldt, 2007; Pinker, 1997). In foraging societies, status can often be acquired through skill in hunting or knowledge of plants (Pinker, 1997; von Rueden, 2014). In other societies, such as the Yanomamo in the Amazon, status can be gained through violence and military conquest (Chagnon, 1968). Thus we can see that status comes in different forms in different cultures, but the basis of status within cultures can even change across historical time. For example, English society shifted from feudalism, to aristocracy, to a modern capitalist system, whereby the basis on which status has been accorded has shifted from status that was fixed at birth, to status that can be acquired and changed to a significant degree through one's own pursuits (De Botton, 2005).

Even at one particular time within cultures there can be different ways of gaining status. As we saw when discussing the ethological literature, animals typically gain dominance through ritual agonistic behaviours. In humans, while status hierarchies are sometimes based on aggressive dominance contests, unlike other animals, our status hierarchies are not only based on dominance (von Rueden, 2014). In many small-scale societies, status can be gained through forceful means, but also through persuasion, whereby

influence is gained through having the consent of followers (Henrich & Gil-White, 2001). Among the Yanomamo, aggression, belligerence, and physical domination can be used to gain status, but diplomacy and political alliances have also been effective in making successful headmen (Chagnon, 1968).

Using an evolutionary perspective, Barkow (1975, 1989) argues that agonistic primate dominance evolved into human prestige. Prestigious individuals possess culturally valued skills and abilities that gain them the respect and approbation of others. Barkow argues that our desire for prestige is homologous with the tendency of other primates to strive for dominance, and that we derive our self-esteem from our relative standing in these prestige hierarchies (Barkow, 1975, 1989). Later researchers building on Barkow's work have argued that dominance and prestige are two different strategies for gaining status in humans, and that both strategies exist due to evolutionary pressures (Cheng et al., 2013; Henrich & Gil-White, 2001). In fact, in social psychology, the term "status" is frequently defined in the same way as prestige; as having the respect, admiration, and esteem of others (Anderson et al., 2015; Anderson & Kilduff, 2009; Benoit-Smullyan, 1944; Blader & Chen, 2012, 2014; Fast, Halevy, & Galinsky, 2012; Fiske, 2010; Fragale, Overbeck, & Neale, 2011; Hays, 2013; Keltner, Gruenfeld, & Anderson, 2003; Lovaglia & Houser, 1996; Magee & Galinsky, 2008; Ridgeway & Correll, 2006). Putting aside the debate on the definition of the term status, we argue that prestige can be considered a type of status (Henrich & Gil-White, 2001), since it is at least one way of ascending a hierarchy. Research supports this idea, with some arguing that people often do not get status through bullying and intimidation, but rather by being valuable to the group by having competence and the willingness to help (Anderson & Kilduff, 2009). The anthropological literature also shows that in many societies, individuals are able to gain high status due to their skills or knowledge (von Rueden, 2014).

Since the status based on prestige is gained through having knowledge or competence in any valuable skill, there are countless ways that it could be obtained: skill in hunting, weaving, building, art, knowledge of edible plants, and so on. Therefore, as well as the

possibility of status being gained through multiple means, prestige as a type of status might come in a potentially infinite number of varieties. This point raises the issue of the contextual dependence of status (Anderson et al., 2015). Status can vary from one group to another because what constitutes status is different in different groups. Therefore individuals can have different statuses in different contexts, and an individual does not just have one status, but rather they have a particular status in every hierarchy in which they belong. As such, status is context dependent, but importantly, it is also psychological. In formalised hierarchies, status can be given an objective label, such as "CEO", which involves specific roles and privileges. However in many cases, particularly prestige, status is a subjective psychological evaluation within social relationships (Blader & Chen, 2014), and "lives in the minds of others" (p. 577, Anderson et al., 2015).

The above discussion shows that humans are hierarchical, while the differences between us and other animals, as well as cultural variation, shows that status comes in different forms. In other animals, status typically means dominance, and is achieved through the use of agonistic behaviour, but in humans status can take other forms, such as prestige. Thus for humans there are many different ways in which one can gain high status within a hierarchy, and many different ways in which those hierarchies and status within those hierarchies can take form. This reflects the fact that "status" has been defined in a variety of ways in the psychological literature (Blader & Chen, 2014; Cheng et al., 2013). Even though status comes in different forms and has different meanings in different cultures, status hierarchies or the regulation of status hierarchies are human universals, and are a part of our evolved nature. Having shown that status can come in many forms, we will now turn to the question of whether high status in humans results in the fitness payoffs that are predicted by evolutionary theory.

The Benefits of High Status in Humans

As demonstrated above, humans societies are generally hierarchical, in common with many other animals. As we also saw, hierarchies in human societies and the basis of status within these hierarchies vary within and across cultures, and over time. Having shown that humans do have a tendency to be hierarchical, we must now examine whether this is consistent with predictions from evolutionary theory regarding the outcomes of status. Evolutionary theorists argue that human hierarchies have their origins in our pre-human ancestral past (Barkow, 1975, 1989; Buss, 2008a; Cummins, 2006; Eibl-Eibesfeldt, 2007), so showing that our hierarchical tendencies are consistent with evolutionary predictions is necessary for supporting the case that hierarchy is a result of our evolved nature. In discussing the non-human animal literature, we saw the survival and reproductive benefits for having high status, as well as the costs avoided by accepting subordinate status for those that are less able to obtain high status. We will now examine whether similar adaptive benefits exist for having high status, and whether similar costs are avoided by accepting a lower position in the hierarchy in humans. This is important because showing what adaptive problems are solved by seeking high status and by accepting subordinate status is crucial to any evolutionary theory on status hierarchies in humans and explaining why we expect individual differences in relation to the psychology of status (Buss, 2008a).

As we saw in our discussion of the animal literature, there are many survival benefits of high status, including greater access to food and other resources, as well as protection from predators and other environmental hazards. Since status involves priority of access to resources (Cummins, 2006), in humans this might mean owning or controlling material resources and increased social support (Hogan & Hogan, 1991). This might entail having better access to food, shelter, and other material benefits, and therefore enhanced chances of survival (von Rueden, 2014). In the industrialised world, when high status entails material wealth, survival can be enhanced through better access to healthcare, as well as better access to nutrition and other resources (Siegrist & Marmot, 2004). Research has in fact found a

positive relationship between socioeconomic status and various positive physical and psychological health outcomes (Adler et al., 1994; Kubzansky, Kawachi, & Sparrow, 1999; Siegrist & Marmot, 2004).

Other research has found that it is not only objective measures of status such as socioeconomic status that provides benefits to our well-being, but also our own perceived status. Studies have found that subjective socioeconomic status was independently related to better physical and psychological functioning over objective socioeconomic status, and in some studies, even more strongly associated (Adler, Epel, Castellazzo, & Ickovics, 2000; Akinola & Mendes, 2014; Hu, Adler, Goldman, Weinstein, & Seeman, 2005; Operario, Adler, & Williams, 2004; Singh-Manoux, Adler, & Marmot, 2003; Singh-Manoux, Marmot, & Adler, 2005). Similar results have been found in studies on "sociometric status", which incorporates the degree to which one is respected or admired by others and one's own perceptions of feeling respected or admired by others. This measure of sociometric status was found to have a greater beneficial effect on subjective well-being than socioeconomic status (Anderson, Kraus, Galinsky, & Keltner, 2012). This bears some similarity to the sociometer theory of self-esteem, which holds that self-esteem is a reflection of one's sense of social belonging (Leary & Baumeister, 2000). Social belonging also has benefits similar to those of high status (Baumeister & Leary, 1995), indicating that at least some of the benefits of high status for well-being can be obtained at more moderate ranks. This makes sense since we should expect a continuum of costs and benefits in status hierarchies, where low rank carries costs, and moderate and high rank carries increasing benefits.

There is a body of literature showing that feeling inferior is associated with a variety of negative psychological outcomes such as depression, anxiety, stress, shame, and social anxiety (Cheung, Gilbert, & Irons, 2004; Gilbert, 2000; Gilbert et al., 2007; Gilbert, McEwan, Bellew, Mills, & Gale, 2009; Zuroff, Fournier, & Moskowitz, 2007). Cross-sectional research has also found a relationship between low status and increased cortisol, as well as other negative health outcomes (Lupien, King, Meaney, & McEwen; Rosmond & Bjorntorp,

2000; Sapolsky, 2004). Furthermore, experimental research has found that when participants are manipulated to have high social status or power, they show better performance on a task compared to low-status individuals, as well as various other benefits (Akinola & Mendes, 2014). This research shows the benefits of high status, and even just the perception of having high status, for material, physical, and psychological well-being, all of which are central to survival.

Status and Reproductive Success in Humans

Evolutionary theory also predicts that there are reproductive benefits of high status. This is partly because having high status means being better able to provide for one's children, and therefore better chances of survival for them (von Rueden, 2014). This, along with the survival benefits of high status described above, applies to both men and women. However, this relationship between status and reproductive success is also due to increased mating opportunities among high-status men, as predicted by evolutionary theory (Buss, 2008a; von Rueden, 2014). While high-status has survival and reproductive benefits for both men and women, high-status men are more likely to have greater access to sexual partners, which can greatly increase their reproductive output. This is partly because high status men might be better equipped to compete with other men for access to women, but also because women prefer high status men as partners (Buss, 2008a; Fletcher, Tither, O'Laughlin, Friesen, & Overall, 2004; Li, Bailey, Kenrick, & Linsenmeier, 2002; Li & Kenrick, 2006, Li, et al., 2013). Whereas, reproductive output is not as dramatically enhanced for women due to there being greater natural limits on the number of offspring women can produce in their lifetime. Therefore women are not expected to be as high on status striving compared to men, but women should prefer to mate with high-status men since it can improve the survival and reproductive conditions for their themselves and their offspring, given that human males typically invest in their partners and their young (Buss, 2008a).

Anthropological studies have found that high-status men have greater reproductive success in small-scale societies (Hill, 1984; Smith, 2004; von Rueden, 2014). History also shows that high-status men in the first six civilisations in the world fathered many children through having sexual access to hundreds, and sometimes thousands, of women (Betzig, 1993). Other studies have found a relationship between status and reproductive success in more recent polygynous societies (Mealey, 1985). This connection between status and reproductive success is not typically found in the modern, industrialised world due to the cultural norm of monogamy and the use of contraception (Buss, 2008a; Hill, 1984; Pérusse, 1993). However, research has found that high status men in modern, industrialised societies still have a greater potential for reproductive success through a greater likelihood of copulation frequency (Pérusse, 1993). More recently, a relationship has been found between status and greater reproductive success among men in modern, industrialised societies (Hopcroft, 2006, 2015). This evidence provides support for the evolutionary argument about the relationship between status and reproductive success that holds even in modern, industrialised societies, which are very much unlike those we evolved in.

The Benefits of Accepting Low Status

Having shown that high status has benefits, we also need to show that accepting low status has benefits for those who are not equipped to obtain high status (Buss, 2008a). As we saw earlier, animals form hierarchies because lower-ranked individuals are willing to accept lower status rather than fighting to increase it. This is the case because the most adaptive thing for an individual to do is to gain the highest possible rank at the time, and that means being able to accept lower rank if that is all that can be achieved for that individual (Eibl-Eibesfeldt, 2007). For example, for a man of strong physical build it might make sense to pursue high status using dominant behavioural strategies, while this might not be the case for someone who does not have these characteristics. Whether or not it is beneficial or potentially costly to pursue higher status can depend on a variety of other characteristics or

circumstances, including available resources and allies. Research has shown this effect in humans, for example in one study that found that individuals preferred to accept lower rank when they felt they provided less value to the group (Anderson, Willer, Kilduff, & Brown, 2012). Therefore not all individuals should be driven to pursue high status all the time, and sometimes the most adaptive thing to do is to accept a lower position in the hierarchy, if that is all that one can safely occupy. Otherwise, the pursuit of high status might result in costs to the individual. There is evidence to suggest that people who over-estimate their status in groups are punished for it (Anderson, Ames, & Gosling, 2008). Furthermore, a great deal of competition and aggression between men is related to status, much of which involves physical violence and even homicide (Campbell, 2005; Liddle, Shackelford, & Weekes-Shackelford, 2012; Wilson & Daly, 1985). This shows that the competition for status is potentially very dangerous and costly for humans as well as animals, particularly those not equipped to compete successfully for it. If the competition for status is potentially dangerous and over-estimating one's status is costly, then this shows that it is better for some individuals to simply accept lower status, in line with evolutionary theory.

The benefits of high status, the costs of low status, and the pressure to accept low status when high status cannot be obtained show the importance of status to human life. These consequences of status are found throughout the world, from traditional societies to modern industrialised societies. Status affects us physically and psychologically, and has consequences for our reproductive prospects. Status hierarchies occupy a central role in our social lives, and are the result of our evolved psychological nature.

Mechanisms for Processing Status-Relevant Information and Individual Differences

Since successfully navigating life within status hierarchies has significant implications for our survival and reproduction, evolutionary theory predicts that our minds are evolved to manage living within hierarchies. Therefore we should have specialised psychological mechanisms for processing status-relevant information and negotiating status hierarchies.

Evolutionary psychologists have long argued that we have various psychological mechanisms evolved to solving adaptive problems, such as social exchange (Cosmides & Tooby, 2005), and mating (Kavanagh, Robins, & Ellis, 2010; Lukaszewski & Roney, 2009). Since negotiating status hierarchies is also an adaptive problem, many evolutionary psychologists have already argued that we should have an array of evolved psychological mechanisms specifically related to the social rank domain (Bugental, 2000; Buss, 2008a; Cummins, 1996, 1998, 2006; Zuroff, Fournier, Patall, & Leybman, 2010). Negotiating status hierarchies is a complicated task, and therefore there should be a variety of these mechanisms in order to deal with the numerous aspects surrounding hierarchy negotiation.

Given our prior discussion about the benefits of high status, an immediately obvious adaptive problem surrounding hierarchy negotiation is ascending status hierarchies. Therefore we would expect a variety of evolved psychological mechanisms specialised for this purpose. An example of one such mechanism could simply be the desire for status. As we argued above, there are many different forms of status, which can be gained through many different means. Status is also contextually dependent (Anderson et al., 2015), and can be different in different groups and contexts. Therefore this mechanism must be broad enough to drive individuals to gain status in whatever form it takes in their social environment, and in whichever way that it can be obtained for that particular individual. The mechanisms should not be specialised towards desiring any specific type of status, but towards the understanding of what is high or low status in the relevant context.

This flexibility in evolved psychological mechanisms relating to status makes sense evolutionarily. If the mechanisms only respond to narrow inputs, then they lack the flexibility to deal with the varied means by which status can be gained in human societies. It is clearly most adaptive to be flexible to various environmental inputs, since this flexibility in desiring any type of status would make these cognitive mechanisms most successful. Thus these evolved psychological mechanisms for seeking status should drive individuals to desire status in whatever way they can possibly obtain it and at any reasonable opportunity that presents

itself, for example, being by dominant, being cooperative, being skilled in some particular task, and so on.

As we have argued, while pursuing status might have its benefits, getting to the top of hierarchies is only one part of hierarchy negotiation. In some cases is it more adaptive for individuals to accept a lower rank rather than pursuing a higher rank. For instance, if one is unlikely to win a contest for status, then the best strategy is simply not to compete for higher status if there are risks or costs involved for doing so. Therefore, any mechanisms for pursuing status should be sensitive to the fact that for some individuals it is more adaptive to accept lower rank if that is the safer option, and the desire for status should be lowered. Furthermore, there are other factors that could influence the strength of the desire for status, such as life history factors (Chisholm et al., 1993, Kaplan & Gangestad, 2005). For example, if the desire for status relates to attracting partners and providing for one's children, then the desire should be stronger for those who are younger, when these activities are a greater priority. These psychological mechanisms should take into account these various contingencies and environmental inputs and adjust to them accordingly, similar to the ways in which other animals make assessments about their ability to compete for dominance. Therefore the mechanism for the desire for status should be sensitive to inputs from other mechanisms for understanding when to accept a lower rank. For this reason, we would expect individual differences in the desire for status in humans.

Evolutionary psychologists have proposed a mechanism that might be adapted for accepting lower status. As we discussed earlier, after an agonistic encounter among animals, the losing animal yields submissively to the victor. Price and Sloman (1987) argued that humans have similar mechanisms for responding to a loss in status, and that some cases of depression might be the result of such a mechanism. They argued that in these instances the depressive state that occurs in humans as a result of defeat shares the same primitive neural hardware as the yielding response in other animals. Thus depression and the submissive behaviour that can accompany it might in some cases be the result of involuntary responses

that evolved as a strategy for responding to defeat (M. Fournier, Zuroff, & Moskowitz, 2007; Gilbert, 1992, 2000; Gilbert, Allan, & Trent, 1995; Gilbert et al., 2009; Nesse, 2000; Price, Sloman, Gardner, Gilbert, & Rohde, 1994; Sloman & Price, 1987; Zuroff et al., 2007). This adaptation functions to inhibit individuals from taking risks after they have experienced defeat and prevents these low-status individuals from taking risks associated with attempting to increase their status when they are not equipped to do so. This could be an example of a psychological mechanism evolved for accepting lower rank when a contest for rank has been lost. Furthermore, an experience of defeat could also contribute as another source of individual differences in the desire for status, and a variety of other status-relevant psychological processes and behaviours.

While the desire for status is one possible evolved psychological mechanism, in order to navigate the tasks of knowing when to try and increase status and when to accept lower status, there must be many more of these mechanisms, as others have argued (Bugental, 2000; Buss, 2008a; Cummins, 1996, 1998, 2006; Zuroff et al., 2010). As well as the desire for status, there should be other mechanisms relating to pursuing higher rank, as well as mechanisms for maintaining rank. There should also be mechanisms for understanding, assessing, and evaluating one's own rank and others' rank. Naturally there are benefits to accurately perceiving one's own status, and relating in appropriate ways to those who rank above and below oneself. We would also expect there to be an array of mechanisms geared towards understanding how hierarchies work, for example, those for recognising where there are hierarchies and what form they take.

Much like the desire for status, there might be individual differences in all these status-relevant psychological mechanisms. Individual differences in any of these mechanisms could explain how effectively and successfully individuals gain and maintain status, or best adapt to the maximum rank they can attain without risking incurring costs. Measuring these individual differences might tell us something about who is successful in gaining status, and who avoids the competition for status, among other things. As pointed out recently by

Anderson et al. (2015), individual differences in the strength of the status motive need to be considered; a question that is very much on the cutting edge in psychology. Evolutionary psychologists have argued that individual differences are consistent with evolutionary theory, with functional explanations of the costs and benefits of being high and low on various personality traits (Buss, 2008b; Nettle, 2006). If there are individual differences in these psychological mechanisms relating to status, then it would be useful to have some measure of how individuals differ in these various these status-relevant factors. We will now turn to the literature on measures of individual differences related to status in order to examine what existing scales can provide for investigating status-relevant individual differences.

Existing Measures of Individual Differences Relating to Status

There are a number of existing scales that relate in some way to status and status hierarchies. We will review these existing status-relevant measures in the literature in order to identify gaps for new scales on previously unmeasured constructs. We will consider scales that relate to status in any form, such as dominance, power, prestige, and other concepts related to status, which also serves to illustrate the variety of conceptualisations of status in the individual differences literature.

First of all, there are a number of scales that relate in some way to the desire for status. One such scale is Gilbert's "Striving to Avoid Inferiority Scale" (Gilbert et al., 2007), which has two factors – insecure striving and secure non-striving. Insecure striving measures the belief that one has to strive for high status in order to avoid being seen as inferior, and secure non-striving measures a sense of security in not needing to strive to be accepted by others. While neither of these subscales are a direct measure of the desire for status, insecure striving should have a positive association with the desire for status, and secure non-striving, a negative association. Another construct that relates more broadly to the desire for status is competitiveness, of which there are several existing measures (Griffin-Pierson, 1990; Houston, Harris, McIntire, & Francis, 2002; Ryckman, Hammer, Kaczor, & Gold, 1990).

People who are competitive might be more likely to desire high status because they are driven by a desire for superiority and success. Some multi-dimensional personality scales also have subscales that measure constructs related to the desire for status, in the sense that they measure some specific aspect of status, such as achievement or leadership. The Achievement Motivation Scale (Cassidy & Lynn, 1989) measures a variety of factors of achievement motivation, and the Hogan Personality Inventory (Hogan & Hogan, 2007) has an ambition scale that measures, among other things, competitiveness and the tendency towards leadership. The Manifest Needs Questionnaire has a subscale that measures the need for leadership and dominance in the workplace (Steers & Braunstein, 1976). Murray's Thematic Appreciation Test (Westen, 1999) can be used to measure the need for power and need for achievement. However this test is a projective test rather than a scale, and these themes are only possible unconscious motives that can be uncovered by the test, which makes the test less useful for those looking for a quantitative measure. As we can see there are a number of scales relevant to the desire for status, but out of all these scales, none provide a clear and straightforward measure of the desire for high status that is not specific to any type of status.

As well as scales relating to the desire for status, there are also a number of scales that measure one's perceived status in some sense. For example, Allan and Gilbert's (1995) Social Comparison Scale provides a measure of how one feels they compare to others on various bipolar constructs such as competence, talent, likeability, and acceptance. There are also a number of scales that measure perceived status in a specific form. For example, the Sense of Power Scale measures an individual's own sense of having power (Anderson, John, & Keltner, 2012), and the Dominance and Prestige Scale (Cheng, Tracy, & Henrich, 2010) measures self-perceived dominance and prestige. There are many more scales that measure interpersonal dominance, either through scales that measure dominance as a single construct (Buss & Craik, 1980; Goldberg et al., 2006; Ray, 1981), or as a subscale within a broad, multi-dimensional personality scale (Gough & Bradley, 1996; Jackson, 1974; Mehrabian, 1996; Russell & Karol, 2002; Tellegen, 1999). Thus we can see that there are a variety of

scales measuring specific forms of perceived status, but not a direct measure of perceived status that is not restricted to any type of status.

There are also some existing scales that measure how people behave within status hierarchies. For example, the Hierarchy Negotiation Instrument (Kyl-Heku & Buss, 1996; Lund, Tamnes, Moestue, Buss, & Vollrath, 2007) measures the various tactics that individuals use to gain status in groups. The Rank Style with Peers Questionnaire (Zuroff et al., 2010) measures three different behavioural styles in hierarchies: dominant leadership, coalition-building, and ruthless self-advancement. Then are other scales that are more broadly related to the status domain, such as Social Dominance Orientation (SDO) (Pratto, Sidanius, Stallworth, & Malle, 1994). The SDO scale measures favourable attitudes towards hierarchies, although this refers to hierarchies involving groups rather than individuals within hierarchies.

Other constructs that do not directly relate to status and hierarchies might also relate to the concern with status or perceived status. Narcissism entails a sense of superiority and grandiosity, and people high on narcissism are likely to perceive themselves to be superior and desire to demonstrate their superiority to others (Morf & Rhodewalt, 2001). Recent research has found that those higher on narcissism do in fact attain higher status, but only in the short term (Carlson & DesJardins, 2015). Therefore narcissism is likely to relate to the concern with status, although it is not a direct measure of either of these constructs. This overt form of non-clinical narcissism can be measured with the Narcissistic Personality Inventory (NPI) (Raskin & Terry, 1988). Individuals who score high on covert narcissism (Hendin & Cheek, 1997; Pincus et al., 2009) are also known to be concerned with status, although they tend to keep these concerns hidden. Another construct potentially related to perceived status is self-esteem (Rosenberg, 1965); a prediction in line with Barkow's (1975, 1989) evolutionary argument that our sense of our own prestige shapes our self-esteem. This is also somewhat congruent with the sociometer theory of self-esteem, which is also based in evolutionary theory (Leary & Baumeister, 2000). This theory holds that self-esteem acts a

monitor of one's self-perceived social belonging, and therefore this sense of being valued by others could also bear some relationship to one's perceived status. The tendency to make social comparisons, which can be measured with the Iowa-Netherlands Comparison Orientation Measure (INCOM) (Gibbons & Buunk, 1999), is also likely to be related to the concern with status. This is because comparing oneself with others may occur for the purpose of finding out where one is ranked in comparison (Gilbert, Price, et al., 1995), and this tendency might be higher in those who are more concerned about their status. Furthermore, since being able to negotiate hierarchies means being able to accurately evaluate one's rank, people who are high on comparison orientation might be more accurate in understanding their own status compared to others.

As we can see, there are a number of scales relevant to the status domain, including those relating in some way to the desire for status, perceived status, how people behave within hierarchies, and attitudes towards hierarchies. This demonstrates not only the multiplicity of conceptualisations of status, but also the recognition of the importance of the topic, given the attention it has received. However there are potentially many more aspects of status that are not addressed in these existing scales, leaving gaps in the literature in regards to measuring individual differences relevant to the status domain. For example, there are potentially unmeasured constructs relating to understanding hierarchies and one's own rank, as well as more explicit measures relating to the pursuit of status. Furthermore, there is also room for more direct measures of the desire for status and perceived status that are not specific to any type of status. These individual differences might have consequences relevant to survival and reproduction, and are also potentially relevant to our well-being.

Summary and Overview of this Thesis

Status is a topic recognised as important not just by psychologists, but by ethologists, sociologists, and anthropologists. As we have seen, many animals have the tendency to be hierarchical, and humans are no exception. Our tendency to form status hierarchies is likely

to have deep evolutionary roots, although unlike those of other animals, human hierarchies are not just based on dominance and agonism. Humans also form hierarchies based on prestige and power, and the basis of what constitutes status can also vary across cultures, within cultures, and across time. Having high status carries many benefits, and having low status can be costly in terms of well-being, survival, and reproductive success. However, as we saw, for many individuals who are not equipped to attain high status, accepting low status might be the more adaptive strategy. Therefore we would expect individual differences in the desire for status. However, on average we would expect men to be higher on the desire for status than women, given that men have far greater reproductive benefits from high status than women. Thus while there might be selection effects for the desire for status, selection should also endow us with mechanisms for knowing when it is best to accept lower status. Given that our status and our ability to manage life in a hierarchical world have such profound implications for our well-being, the topic deserves more investigation. Any individual differences relating to the status domain are likely to be relevant to our well-being, survival, and reproductive success, and therefore we need to be able to measure them. A number of existing scales measuring individual differences have been developed using an evolutionary framework (Cheng et al., 2010; Wilke et al., 2014; Zuroff et al., 2010), and as we can see from the review of scales above, there is scope for many more scales relating to the status domain.

The Aim of this Thesis

The aim of this thesis is to examine individual differences related to the status domain, and to develop tools to measure these differences. We approached the issue of the adaptive problems relevant to status hierarchies from an evolutionary perspective, and developed our proposals for measures of these individual differences based on their relevance to successfully negotiating hierarchical life. We use a broad conception of status because, as argued above, there are many different forms of status in humans, and evolution should endow us with

mechanisms that are able to process status in all its forms. This thesis is divided into three major studies. The first study develops a broad, multifaceted scale measuring status-relevant attitudes, beliefs, and desires. This study began with the identification of a number of potential facets of "Status Consciousness". We proposed these facets on the basis that they are relevant to managing life within status hierarchies, and would have implications for how well-adapted individuals are to hierarchical life. The second study narrows in on the desire for status, and develops a measure of this construct, and of perceived superiority. As discussed above, we argue that there are individual differences in the desire for status based on evolutionary theory. Individuals should desire high status because of the fitness benefits, however there are also benefits for having a lower desire for status, if high status cannot be successfully or safely achieved. The final study addresses some of the questions raised in the first two studies about the meaning of status. Given that we use a broad conception of status in our scales, we wanted to examine the validity of doing so. We used a qualitative design to examine laypeople's understanding of the concept of status. This has implications both for how we define and conceptualise status in the psychological literature, and for the validity of using the term "status" in our scale. The thesis is then rounded off with a discussion of how the studies address the thesis' aims. Implications, limitations, and suggestions for future research will be discussed.

References

Adler, N. E., Boyce, T., Chesney, M. A., Cohen, S., Folkman, S., Kahn, R. L., & Syme, S. L. (1994). Socioeconomic status and health: The challenge of the gradient. *American Psychologist, 49*, 15-24.

Adler, N. E., Epel, E., Castellazzo, G., & Ickovics, J. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy white women. *Health Psychology, 19*, 586-592.

Akinola, M., & Mendes, W. B. (2014). It's good to be the king: Neurobiological benefits of higher social standing. *Social Psychological and Personality Science, 5*, 43-51.

Allan, S., & Gilbert, P. (1995). A social comparison scale: Psychometric properties and relationship to psychopathology. *Personality and Individual Differences, 19*, 293-299.

Anderson, C., Ames, D. R., & Gosling, S. D. (2008). Punishing hubris: The perils of overestimating one's status in a group. *Personality and Social Psychology Bulletin, 34*, 90-101.

Anderson, C., Hildreth, J. A. D., & Howland, L. (2015). Is the desire for status a fundamental human motive? A review of the empirical literature. *Psychological Bulletin, 141*, 574-601.

Anderson, C., John, O. P., & Keltner, D. (2012). The personal sense of power. *Journal of Personality, 80*, 313-344.

Anderson, C., & Kilduff, G. J. (2009). The pursuit of status in social groups. *Current Directions in Psychological Science, 18*, 295-298.

Anderson, C., Kraus, M. W., Galinsky, A. D., & Keltner, D. (2012). The local-ladder effect social status and subjective well-being. *Psychological Science, 23*, 764-771.

Anderson, C., Willer, R., Kilduff, G. J., & Brown, C. E. (2012). The origins of deference: When do people prefer lower status? *Journal of Personality and Social Psychology, 102*, 1077-1088.

Ansbacher, H. L., & Ansbacher, R. R. (Eds.). (1956). *The individual psychology of Alfred Adler: A systematic presentation in selections from his writings*. New York: Harper and Row.

Barkow, J. H. (1975). Prestige and culture: A biosocial interpretation. *Current Anthropology, 16*, 553-572.

Barkow, J. H. (1989). *Darwin, sex, and status: Biological approaches to mind and culture*. Toronto: University of Toronto Press.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117,* 497-529.

Benoit-Smullyan, E. (1944). Status, status types, and status interrelations. *American Sociological Review, 9*, 151-161.

Berger, J., Cohen, B. P., & Zelditch, M., Jr. (1972). Status characteristics and social interaction. *American Sociological Review, 37*, 241-255.

Berger, J., Rosenholtz, S. J., & Zelditch, M. (1980). Status organizing processes. *Annual Review of Sociology, 6*, 479-508.

Bernstein, I. S. (1976). Dominance, aggression and reproduction in primate societies. *Journal of Theoretical Biology, 60*, 459-472.

Betzig, L. (1993). Sex, succession, and stratification in the first six civilizations: How powerful men reproduced, passed power on to their sons, and used power to defend their wealth, women, and children. In L. Ellis (Ed.), *Social stratification and socioeconomic inequality: A comparative biosocial analysis* (Vol. 1, pp. 37-74). Westport: Praeger Publishers/Greenwood Publishing Group.

Blader, S. L., & Chen, Y. R. (2012). Differentiating the effects of status and power: A justice perspective. *Journal of Personality and Social Psychology, 102*, 994.

Blader, S. L., & Chen, Y. R. (2014). What's in a name? Status, power, and other forms of social hierarchy. In J. T. Cheng, J. L. Tracy & C. Anderson (Eds.), *The psychology of social status* (pp. 71-95). New York: Springer.

Boehm, C. (1999). *Hierarchy in the forest: The evolution of egalitarian behavior*. Cambridge: Harvard University Press.

Boehm, C., Barclay, H. B., Dentan, R. K., Dupre, M. C., Hill, J. D., Kent, S., . . . Rayner, S. (1993). Egalitarian behavior and reverse dominance hierarchy [and comments and reply]. *Current Anthropology*, 227-254.

Breed, M. D., Smith, S. K., & Gall, B. G. (1980). Systems of mate selection in a cockroach species with male dominance hierarchies. *Animal Behaviour, 28*, 130-134.

Bugental, D. B. (2000). Acquisition of the algorithms of social life: A domain-based approach. *Psychological Bulletin, 126*, 187-219.

Buss, D. M. (2008a). *Evolutionary psychology: The new science of the mind* (3rd ed.). Boston: Pearson/Allyn and Bacon Publishers.

Buss, D. M. (2008b). Human nature and individual differences: Evolution of human personality. In O. P. John, R. W. Robins & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 29-60). New York: The Guilford Press.

Buss, D. M., & Craik, K. H. (1980). The frequency concept of disposition: Dominance and prototypically dominant acts. *Journal of Personality, 48*, 379-392.

Campbell, A. (2005). Aggression. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 628-652). Hoboken: John Wiley & Sons.

Carlson, E. N. & DesJardins, N. M. L. (2015). Do mean guys always finish first or just say that they do? Narcissists' awareness of the social status and popularity over time. *Personality and Social Psychology Bulletin, 41,* 901-917.

Cassidy, T., & Lynn, R. (1989). A multifactorial approach to achievement motivation: The development of a comprehensive measure. *Journal of Occupational Psychology, 62*, 301-312.

Chagnon, N. A. (1968). *Yanomamo: The fierce people*. New York: Holt, Rinehart and Winston.

Cheney, D. L., & Seyfarth, R. M. (1990). *How monkeys see the world: Inside the mind of another species*. Chicago: University of Chicago Press.

Cheng, J. T., Tracy, J. L., Foulsham, T., Kingstone, A., & Henrich, J. (2013). Two ways to the top: Evidence that dominance and prestige are distinct yet viable avenues to social rank and influence. *Journal of Personality and Social Psychology, 104*, 103-125.

Cheng, J. T., Tracy, J. L., & Henrich, J. (2010). Pride, personality, and the evolutionary foundations of human social status. *Evolution and Human Behavior, 31*, 334-347.

Cheung, M. S. P., Gilbert, P., & Irons, C. (2004). An exploration of shame, social rank and rumination in relation to depression. *Personality and Individual Differences, 36*, 1143-1153.

Cosmides, L., & Tooby, J. (2005). Neurocognitive adaptations designed for social exchange. In D. M. Buss (Ed.), *Evolutionary psychology handbook* (pp. 584-627). New York: Wiley.

Cowlishaw, G., & Dunbar, R. I. M. (1991). Dominance rank and mating success in male primates. *Animal Behaviour, 41*, 1045-1056.

Cummins, D. D. (1996). Dominance hierarchies and the evolution of human reasoning. *Minds and Machines, 6*, 463-480.

Cummins, D. D. (1998). Social norms and other minds: The evolutionary roots of higher cognition. In D. D. Cummins & C. Allen (Eds.), *The evolution of mind* (pp. 30-50). New York: Oxford University Press

Cummins, D. D. (2006). Dominance, status, and social hierarchies. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 676-697). Hoboken, NJ: Wiley.

Davies, N. B., Krebs, J. R., & West, S. A. (2012). *An introduction to behavioural ecology* (4th ed.). Chichester: Wiley-Blackwell.

De Botton, A. (2005). *Status anxiety*. New York: Vintage.

De Waal, F. (2007). *Chimpanzee politics: Power and sex among apes*. New York: JHU Press.

Dewsbury, D. A. (1982). Dominance rank, copulatory behavior, and differential reproduction. *Quarterly Review of Biology, 57*, 135-159.

Drews, C. (1993). The concept and definition of dominance in animal behaviour. *Behaviour, 125*, 283-313.

Dunbar, R. I. M. (1988). *Primate social systems*. Kent: Croom Helm.

Eibl-Eibesfeldt, I. (1970). *Ethology: The biology of behavior*. New York: Holt, Rinehart and Winston.

Eibl-Eibesfeldt, I. (2007). *Human ethology*. New York: Transaction Publishers.

Ellis, L. (1995). Dominance and reproductive success among nonhuman animals: A cross-species comparison. *Ethology and Sociobiology, 16*, 257-333.

Fast, N. J., Halevy, N., & Galinsky, A. D. (2012). The destructive nature of power without status. *Journal of Experimental Social Psychology, 48*, 391-394.

Fisek, M. H., & Ofshe, R. (1970). The process of status evolution. *Sociometry, 33*, 327-346.

Fiske, S. T. (2010). Interpersonal stratification: Status, power, and subordination. In S. Fiske, D. T. Gilbert & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., pp. 941-982). New York: John Wiley & Sons, Inc.

Fletcher, G. J., Tither, J. M., O'Loughlin, C., Friesen, M., & Overall, N. (2004). Warm and homely or cold and beautiful? Sex differences in trading off traits in mate selection. *Personality and Social Psychology Bulletin, 30*, 659-672.

Fossey, D. (1983). *Gorillas in the mist*. Boston: Houghton Mifflin Harcourt.

Fournier, F., & Festa-Bianchet, M. (1995). Social dominance in adult female mountain goats. *Animal Behaviour, 49*, 1449-1459.

Fournier, M., Zuroff, D., & Moskowitz, D. (2007). The social competition theory of depression: Gaining from an evolutionary approach to losing. *Journal of Social and Clinical Psychology, 26*, 786-790.

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.

Frank, R. (1985). *Choosing the right pond: Human behavior and the quest for status*. New

    York: Oxford University Press.

Furuichi, T. (1997). Agonistic interactions and matrifocal dominance rank of wild bonobos

    (Pan paniscus) at Wamba. *International Journal of Primatology, 18*, 855-875.

Gibbons, F. X., & Buunk, B. P. (1999). Individual differences in social comparison:

    Development of a scale of social comparison orientation. *Journal of Personality and*

    Social Psychology, 76, 129-142.

Gilbert, P. (1992). *Depression: The evolution of powerlessness*. New York: The Guilford

    Press.

Gilbert, P. (2000). The relationship of shame, social anxiety and depression: The role of the

    evaluation of social rank. *Clinical Psychology and Psychotherapy, 7*, 174-189.

Gilbert, P., Allan, S., & Trent, D. (1995). Involuntary subordination or dependency as key

    dimensions of depressive vulnerability? *Journal of Clinical Psychology, 51*, 740-752.

Gilbert, P., Broomhead, C., Irons, C., McEwan, K., Bellew, R., Mills, A., . . . Knibb, R.

    (2007). Development of a striving to avoid inferiority scale. *British Journal of Social*

    Psychology, 46, 633-648.

Gilbert, P., McEwan, K., Bellew, R., Mills, A., & Gale, C. (2009). The dark side of

    competition: How competitive behaviour and striving to avoid inferiority are linked to

    depression, anxiety, stress and self-harm. *Psychology & Psychotherapy: Theory,*

    Research & Practice, 82, 123-136.

Gilbert, P., Price, J. S., & Allan, S. (1995). Social comparison, social attractiveness and

    evolution: How might they be related? *New Ideas in Psychology, 13*, 149-165.

Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. G. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality, 40*, 84-96.

Goldhamer, H., & Shils, E. A. (1939). Types of power and status. *American Journal of Sociology, 45*, 171-182.

Goodall, J. (2000). *In the shadow of man*. New York: Houghton Mifflin Harcourt.

Gough, H., & Bradley, P. (1996). CPI manual. Palo Alto: Consulting Psychologists Press.

Griffin-Pierson, S. (1990). The competitiveness questionnaire: A measure of two components of competitiveness. *Measurement and Evaluation in Counseling and Development, 23*, 108-115.

Hawley, P. H. (2002). Social dominance and prosocial and coercive strategies of resource control in preschoolers. *International Journal of Behavioral Development, 26*, 167-176.

Hays, N. A. (2013). Fear and loving in social hierarchy: Sex differences in preferences for power versus status. *Journal of Experimental Social Psychology, 49*, 1130-1136.

Hendin, H. M., & Cheek, J. M. (1997). Assessing hypersensitive narcissism: A reexamination of Murray's Narcism Scale. *Journal of Research in Personality, 31*, 588-599.

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.

Hill, J. (1984). Prestige and reproductive success in man. *Ethology and Sociobiology, 5*, 77-95.

Hogan, R., & Hogan, J. (1991). Personality and status. In D. G. Gilbert & J. J. Connolly (Eds.), *Personality, social skills, and psychopathology: An individual differences approach* (pp. 137–154). New York: Springer.

Hogan, R., & Hogan, J. (2007). *Hogan Personality Inventory*. Tulsa: Hogan Assessment Systems Inc.

Hopcroft, R. L. (2006). Sex, status, and reproductive success in the contemporary United States. *Evolution and Human Behavior, 27*, 104-120.

Hopcroft, R. L. (2015). Sex differences in the relationship between status and number of offspring in the contemporary U.S. *Evolution and Human Behavior, 36*, 146-151.

Houston, J., Harris, P., McIntire, S., & Francis, D. (2002). Revising the Competitiveness Index using factor analysis. *Psychological Reports, 90*, 31-34.

Hu, P., Adler, N. E., Goldman, N., Weinstein, M., & Seeman, T. E. (2005). Relationship between subjective social status and measures of health in older Taiwanese persons. *Journal of the American Geriatrics Society, 53*, 483-488.

Itzkowitz, M. (1977). Interrelationships of dominance and territorial behaviour in the pupfish, Cyprinodon variegatus. *Behavioural Processes, 2*, 383-391.

Jackson, D. N. (1974). *Personality research form manual*. Goshen: Research Psychologists Press.

Kalma, A. (1991). Hierarchisation and dominance assessment at first glance. *European Journal of Social Psychology, 21*, 165-181.

Kavanagh, P. S., Robins, S. C., & Ellis, B. J. (2010). The mating sociometer: A regulatory mechanism for mating aspirations. *Journal of Personality and Social Psychology, 99*, 120-132.

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review, 110*, 265-284.

Kenrick, D. T., Griskevicius, V., Neuberg, S. L., & Schaller, M. (2010). Renovating the pyramid of needs: Contemporary extensions built upon ancient foundations. *Perspectives on Psychological Science, 5*, 292.

Knauft, B. M., Abler, T. S., Betzig, L., Boehm, C., Dentan, R. K., Kiefer, T. M., . . . Rodseth, L. (1991). Violence and sociality in human evolution. *Current Anthropology, 32*, 391-428.

Kubzansky, L., Kawachi, I., & Sparrow, D. (1999). Socioeconomic status, hostility, and risk factor clustering in the normative aging study: Any help from the concept of allostatic load? *Annals of Behavioral Medicine, 21*, 330-338.

Kyl-Heku, L., & Buss, D. M. (1996). Tactics as units of analysis in personality psychology: An illustration using tactics of hierarchy negotiation. *Personality and Individual Differences, 21*, 497-517.

Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 32, pp. 1-62): Academic Press.

Lenski, G. E. (1966). *Power and privilege: A theory of social stratification*. Chapel Hill: UNC Press.

Li, N. P., Bailey, J. M., Kenrick, D. T., & Linsenmeier, J. A. (2002). The necessities and luxuries of mate preferences: Testing the tradeoffs. *Journal of Personality and Social Psychology, 82*, 947-955.

Li, N. P., & Kenrick, D. T. (2006). Sex similarities and differences in preferences for short-term mates: What, whether, and why. *Journal of Personality and Social Psychology, 90*, 468-489.

Li, N. P., Yong, J. C., Tov, W., Sng, O., Fletcher, G. J., Valentine, K. A., . . . Balliet, D. (2013). Mate preferences do predict attraction and choices in the early stages of mate selection. *Journal of Personality and Social Psychology, 105*, 757-776.

Liddle, J. R., Shackelford, T. K., & Weekes-Shackelford, V. A. (2012). Why can't we all just get along? Evolutionary perspectives on violence, homicide, and war. *Review of General Psychology, 16*, 24-36.

Lorenz, K. (1964). Ritualized fighting. In J. D. Carthy & F. J. Ebling (Eds.), *The natural history of aggression* (pp. 39-50). London: Academic Press.

Lovaglia, M., & Houser, J. (1996). Emotional reactions and status in groups. *American Sociological Review, 61*, 867-883.

Lukaszewski, A. W., & Roney, J. R. (2009). Estimated hormones predict women's mate

    preferences for dominant personality traits. *Personality and Individual Differences,*

    47, 191-196.

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.

Lupien, S. J., King, S., Meaney, M. J., & McEwen, B. S. (2001). Can poverty get under your

    skin? Basal cortisol levels and cognitive function in children from low and high

    socioeconomic status. *Development and Psychopathology, 13*, 653-676.

Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self-reinforcing nature of

    power and status. *The Academy of Management Annals, 2*, 351-398.

Maslow, A. H. (1937). Dominance feeling, behavior, and status. *Psychological Review, 44*,

    404-429.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*, 370.

Mazur, A. (1973). A cross-species comparison of status in small established groups.

    American Sociological Review, 38, 513-530.

Mazur, A. (1985). A biosocial model of status in face-to-face primate groups. *Social Forces,*

    64, 377-402.

Mealey, L. (1985). The relationship between social status and biological success: A case

    study of the Mormon religious hierarchy. *Ethology and Sociobiology, 6*, 249-257.

Mehrabian, A. (1996). Pleasure-arousal-dominance: A general framework for describing and

    measuring individual differences in temperament. *Current Psychology, 14*, 261-292.

Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic

    self-regulatory processing model. *Psychological Inquiry, 12,* 177-196.

Nettle, D. (2006). The evolution of personality variation in humans and other animals.

    American Psychologist, 61, 622-631.

Nesse, R. M. (2000). Is depression an adaptation? *Archives of General Psychiatry, 57,* 14-20.

Operario, D., Adler, N. E., & Williams, D. R. (2004). Subjective social status: Reliability and predictive utility for global health. *Psychology and Health, 19*, 237-246.

Parker, G. A. (1974). Assessment strategy and the evolution of fighting behaviour. *Journal of Theoretical Biology, 47*, 223-243.

Pérusse, D. (1993). Cultural and reproductive success in industrial societies: Testing the relationship at the proximate and ultimate levels. *Behavioral and Brain Sciences, 16*, 267-283.

Pincus, A. L., Ansell, E. B., Pimentel, C. A., Cain, N. M., Wright, A. G. C., & Levy, K. N. (2009). Initial construction and validation of the Pathological Narcissism Inventory. *Psychological Assessment, 21*, 365-379.

Pinker, S. (1997). *How the mind works*. New York: Norton.

Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social Dominance Orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*, 741-763.

Price, J. S., & Sloman, L. (1987). Depression as yielding behavior: An animal model based on Schjelderup-Ebbe's pecking order. *Ethology and Sociobiology, 8*, 85-98.

Price, J. S., Sloman, L., Gardner, R., Gilbert, P., & Rohde, P. (1994). The social competition hypothesis of depression. *British Journal of Psychiatry, 164*, 309-315.

Pusey, A., Williams, J., & Goodall, J. (1997). The influence of dominance rank on the reproductive success of female chimpanzees. *Science, 277*, 828-831.

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.

Ray, J. J. (1981). Authoritarianism, dominance and assertiveness. *Journal of Personality Assessment, 45*, 390-397.

Ridgeway, C. L., & Correll, S. J. (2006). Consensus and the creation of status beliefs. *Social Forces, 85*, 431-453.

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

Rosmond, R., & Bjorntorp, P. (2000). Occupational status, cortisol secretory pattern, and
    visceral obesity in middle-aged men. *Obesity Research, 8*, 445-450.

Russell, M., & Karol, D. (2002). *16PF Fifth Edition with updated Norms Administrator's
    Manual*. Champaign: Institute for Personality and Ability Testing.

Russon, A., & Waite, B. (1991). Patterns of dominance and imitation in an infant peer group.
    Ethology and Sociobiology, 12, 55-73.

Ryckman, R. M., Hammer, M., Kaczor, L. M., & Gold, J. A. (1990). Construction of a
    hypercompetitive attitude scale. *Journal of Personality Assessment, 55*, 630-639.

Sapolsky, R. M. (2004). Social status and health in humans and other animals. *Annual Review
    of Anthropology, 33*, 393-418.

Sapolsky, R. (2005). The influence of social hierarchy on primate health. *Science, 308*, 648.

Savin-Williams, R. C. (1979). Dominance hierarchies in groups of early adolescents. *Child
    Development, 50*, 923-935.

Savin-Williams, R. C. (1980). Dominance hierarchies in groups of middle to late adolescent
    males. *Journal of Youth and Adolescence, 9*, 75-85.

Siegrist, J., & Marmot, M. (2004). Health inequalities and the psychosocial environment - two
    scientific challenges. *Social Science and Medicine, 58*, 1463-1473.

Silk, J. B. (1986). Social behavior in evolutionary perspective. In B. B. Smuts, D. L. Cheney,
    R. M. Seyfarth, R. W. Wrangham & T. T. Struhsaker (Eds.), *Primate Societies* (pp.
    318-329). Chicago: University of Chicago Press.

Singh-Manoux, A., Adler, N. E., & Marmot, M. G. (2003). Subjective social status: Its
    determinants and its association with measures of ill-health in the Whitehall II study.
    Social Science and Medicine, 56, 1321-1333.

Singh-Manoux, A., Marmot, M. G., & Adler, N. E. (2005). Does Subjective Social Status Predict Health and Change in Health Status Better Than Objective Status? *Psychosomatic Medicine, 67*, 855-861.

Sloman, L., & Price, J. S. (1987). Losing behavior (yielding subroutine) and human depression: Proximate and selective mechanisms. *Ethology and Sociobiology, 8*, 99-109.

Smith, E. (2004). Why do good hunters have higher reproductive success? *Human Nature, 15*, 343-364.

Steers, R. M., & Braunstein, D. N. (1976). A behaviorally-based measure of manifest needs in work settings. *Journal of Vocational Behavior, 9*, 251-266.

Strayer, F. F., & Trudel, M. (1984). Developmental changes in the nature and function of social dominance among young children. *Ethology and Sociobiology, 5*, 279-295.

Symons, D. (1979). *The evolution of human sexuality*. New York: Oxford University Press.

Tellegen, A. (1999). MPQ (Multidimensional Personality Questionnaire): Manual for administration, scoring, and interpretation. *Minneapolis: University of Minnesota*.

von Rueden, C. (2014). The roots and fruits of social status in small-scale human societies. In J. T. Cheng, J. L. Tracy & C. Anderson (Eds.), *The psychology of social status* (pp. 179-200). New York: Springer.

Westen, D. (1999). *Psychology: Mind, brain, and culture*. New York: John Wiley and Sona.

Wilke, A., Sherman, A., Curdt, B., Mondal, S., Fitzgerald, C., & Kruger, D. J. (2014). An evolutionary domain-specific risk scale. *Evolutionary Behavioral Sciences, 8*, 123-141.

Willer, R. (2009). Groups reward individual sacrifice: The status solution to the collective action problem. *American Sociological Review, 74*, 23-43.

Wilson, M., & Daly, M. (1985). Competitiveness, risk taking, and violence: The young male syndrome. *Ethology and Sociobiology, 6*, 59-73.

Zuroff, D. C., Fournier, M. A., & Moskowitz, D. (2007). Depression, perceived inferiority, and interpersonal behavior: Evidence for the involuntary defeat strategy. *Journal of Social and Clinical Psychology, 26*, 751-778.

Zuroff, D. C., Fournier, M. A., Patall, E. A., & Leybman, M. J. (2010). Steps toward an evolutionary personality psychology: Individual differences in the social rank domain. *Canadian Psychology, 51*, 58-66.

Introduction to Chapter 2

Status consciousness: A preliminary construction of a scale measuring individual differences in status-relevant attitudes, beliefs, and desires

The overarching aim of this thesis is to explore individual differences related to social status. To address this, this first study aimed to develop a new scale that assesses individual differences in various facets of status consciousness. The rationale for this first study begins with the premise that negotiating status hierarchies is an important adaptive problem in human life. Being able to negotiate a hierarchical social world is a complex task that requires the capacity to consider and evaluate many different aspects of status and hierarchies. While there might be a large number of status-relevant issues that must be negotiated, we aimed to name and define a broad range of these factors, although this not argued to be an exhaustive set. Nevertheless, the aim was to identify important status-relevant constructs that have not yet been identified in the literature and to develop a scale to measure them. Evolutionary theory was employed as an overarching framework to argue how each of the proposed factors would be functional in negotiating status hierarchies. More specifically, the factors proposed in this scale were all argued to have adaptive significance, since each was argued to be functional with respect to how people manage life in a hierarchical world. We started with a range of items designed to measure various status-relevant attitudes, beliefs, and desires, for potential inclusion in our "Status Consciousness Scale". Each of the factors derived from our analysis is a novel construct that has not previously been measured via psychological scales. This study also conducted some preliminary validation of the scale by examining correlations with a number of existing status-relevant measures.

Chapter 2

Status consciousness: A preliminary construction of a scale measuring individual differences in status-relevant attitudes, beliefs, and desires.

Author contribution: Beatrice Alba was responsible for the design of the research, data analysis and write-up of the manuscript. Professor Ladd Wheeler and A/Prof Doris McIlwain provided supervision on the research design and feedback on the manuscript. A/Prof Michael P. Jones provided guidance with statistical analysis. Dr Simon Boag provided feedback on the final manuscript for incorporation into this dissertation.

Abstract

This research examined individual differences in how people think about social status via a scale with eight proposed factors. Items designed to measure these factors were administered to an online sample (n = 1009). A factor analysis revealed eight meaningful factors: *rejection of status, high-perceived status, respect for hierarchy, low-perceived status, status display, egalitarianism, belief in hierarchy* and *enjoyment of status*. The 40 items forming these eight factors were then administered to a new sample of online participants (n = 303) alongside measures of self-esteem (Rosenberg, 1965), social dominance orientation (Pratto, Sidanius, Stallworth, & Malle, 1994), competitiveness (Houston, Harris, McIntire, & Francis, 2002), assertiveness (Goldberg et al., 2006), social comparison orientation (Gibbons & Buunk, 1999), overt narcissism (Raskin & Terry, 1988), and covert narcissism (Hendin & Cheek, 1997). Confirmatory factor analyses from this subsequent study supported the model derived in the first study. A preliminary analysis of the validity of this new 'Status Consciousness Scale' was undertaken by examining the correlations between the scale factors and the aforementioned variables, which suggested that the scale has good convergent validity.

The topic of social status and status hierarchies has received attention from both psychologists (Anderson & Kilduff, 2009a; Fournier, Moskowitz, & Zuroff, 2002; Kalma, 1991) and sociologists (Berger, Cohen, & Zelditch, 1972; Faris & Felmlee, 2011; Lovaglia & Houser, 1996; Ridgeway & Diekema, 1989). These researchers have studied power (Keltner, Gruenfeld, & Anderson, 2003; Mast, 2010), dominance hierarchies in adolescents and children (Hawley, 2002; Lease, Musgrove, & Axelrod, 2002; Savin-Williams, 1979), and have explored who gains status in groups and how they do so (Anderson, John, Keltner, & Kring, 2001; Anderson & Kilduff, 2009b).

Evolutionary psychologists have similarly noted the importance of status-related cognition and behaviour, since social status is a matter of adaptive significance (Barkow, 1989; Buss, 2008; Cummins, 2006). Status hierarchies are a widespread element in human society and the animal world more generally (Eibl-Eibesfeldt, 1970, 2007; Ellis, 1995), and thus from an evolutionary perspective it is clear why humans should be concerned about their rank within the hierarchies that pervade our social world. The benefits that are associated with high social status enhance survival, such as better access to material resources, social support, and increased psychological and physical well-being (Cummins, 2006; Hogan & Hogan, 1991; Siegrist & Marmot, 2004; von Rueden, 2014). High status also has reproductive benefits, since high-status individuals are better able to provide for their children (von Rueden, 2014). However, the reproductive benefits of status are particularly significant for men, since high-status men can greater enhance their number of offspring, whereas women are more limited in the number of children they can produce and are likely to reproduce regardless of their status. As a result, men are expected to be higher on status striving, and research has confirmed this (Buss, 2008; Cummins, 2006). Given these survival and reproductive benefits of high status, it is expected that selection has endowed us with evolved psychological mechanisms related to the social rank domain (Buss, 2008; Cummins, 2006; Zuroff, Fournier, Patall, & Leybman, 2010). It is anticipated that there would be many of these mechanisms, each dealing with specific aspects of managing status concerns, such as

those to do with assessing and protecting one's rank, and pursuing a higher rank. As such, there may be adaptively-relevant individual differences in these rank-related psychological mechanisms.

The following research addresses this issue by examining individual differences in attitudes, beliefs, and desires associated with social status. While there is no existing scale that measures all these aspects together, there are a number of scales that measure some aspects of status-related preferences and motivations. For example, the Social Dominance Orientation scale (Pratto, Sidanius, Stallworth, & Malle, 1994) measures the preference for inequality among social groups, and thus the belief that social hierarchies are a good thing in society.

Other scales that do not directly address status concerns may nonetheless be related. For example, the construct of 'competitiveness' (Houston, Harris, McIntire, & Francis, 2002) may in part relate to the desire for high status, since someone with a strong desire to compete in order to win might also seek high status. 'Social comparison orientation', which is the degree to which individuals compare themselves with others (Gibbons & Buunk, 1999), may also relate to how much people care about where they rank in the social world.

On the other hand, self-esteem (Rosenberg, 1965), as an evaluation of one's own worth, may be related to perceived status of oneself. Barkow (1980), for instance, argued that self-esteem is maintained as long as one can view oneself as superior at least to some others. Therefore it is possible that individuals with high self-esteem are also people who tend to view themselves as having high status. Narcissism may also be related to perceived status, since in its grandiose variant, it involves a sense of feeling superior to others (Raskin & Terry, 1988). The Narcissistic Personality Inventory measures this variant of narcissism as a general personality trait rather than the clinical form of narcissistic personality disorder (Raskin & Terry, 1988), and encompasses several elements relevant to status such as authority, superiority, and entitlement. In covert narcissism (Akhtar, 2000) the striving for, and appeal of high social rank may be less apparent, since it is more disguised in its expression, but we

expect this variant of narcissism to also relate to status consciousness. Similarly, interpersonal dominance, such as that measured by the Assertiveness scale (Goldberg et al., 2006), may also be relevant to perceived status since arguably it is a measure of how people behave according to how they believe they rank or how they feel they are entitled to rank.

The Present Research

While existing scales capture some aspects of status-relevant cognition, there has so far been no attempt to give a broad account of status-relevant attitudes, beliefs, and desires in one scale. Furthermore, there are aspects of status-relevant cognition that have not been captured by existing scales. The following research attempts to uncover more of these status-relevant attitudes, beliefs, and desires, and examine them together in a 'Status Consciousness Scale'. Potential factors will now be discussed.

First of all, there is the matter of whether status hierarchies are something that a person even notices at all. It is anticipated that there are differences in the extent to which people pay attention to the hierarchies in the social world, since some individuals may be more attuned to this aspect of social life than others. The awareness of hierarchy also includes understanding of the consequences of occupying different positions within hierarchies, such as recognising that having high status accrues certain benefits. Evolutionary theory would hold that there is adaptive relevance in how well humans are able to observe and understand hierarchies, since this affects their ability to negotiate those hierarchies (Buss, 2008; Cummins, 2006; Zuroff et al., 2010). This first proposed factor addressing status consciousness will be called 'awareness of hierarchy'.

It is further anticipated that there are also individual differences in how we position ourselves in relation to hierarchy, in terms of our attitudes and beliefs. For instance, research on Social Dominance Orientation (Pratto et al., 1994) indicates that some people endorse hierarchies more strongly than others. In the proposed scale, a 'belief in hierarchy' factor addresses the degree to which a person has a favourable view of status hierarchies, such that

they believe that an individuals' rank within a hierarchy is a true reflection of their worth. This essentially entails a view of hierarchies as being worthwhile, and that status provides an accurate reflection of a person's social value. Along similar lines, it is proposed that a 'respect for hierarchy' factor measures how much people behave in a way that they believe is appropriate to their rank within hierarchies and relating to others in a way that they believe is appropriate to their relative standing. Both these factors are argued to have evolutionary significance in that these attitudes and beliefs would shape the extent to which people cooperate with or even attempt to take advantage of the system of hierarchy. Being high on these factors could have adaptive benefits if they allow individuals to negotiate hierarchies successfully, since the successful negotiation of hierarchies should have fitness benefits (Buss, 2008; Cummins, 2006; Zuroff et al., 2010), whereas being low on these factors might mean missing out on these benefits.

At a more personal level, an important factor associated with status consciousness is simply how much people want to rank highly in the social world (Anderson, Hildreth, & Howland, 2015; Buss, 2008), which we call 'status drive'. This may be distinguished from the idea of 'status anxiety', which is how much people worry about their rank in the world (De Botton, 2005; Gilbert et al., 2007). We argue that these two factors are distinct, however, since it may be possible to desire high status, but not feel a great deal of anxiety about how one feels one currently ranks. Conversely, one might feel anxious about personal status but not have the drive or ambition to increase one's status. Along similar lines, another possible factor is how much people enjoy the idea of being in a high-status position and perhaps fantasise about being in a position of superiority, particularly since high status has benefits (Adler et al., 1994; Cummins, 2006; von Rueden, 2014). This factor is labelled here as 'enjoyment of status', and is argued to form an independent factor because the degree to which individuals enjoy thoughts of high status may still vary among those with different levels of status drive and status anxiety. The drive to obtain high status, anxiety about having

low status, and delighting in high status may all be ways in which evolved psychological mechanisms drive individuals to obtain higher rank.

In addition to the above, the notion of 'status display' refers to how much people like to present an image of themselves to others as successful or superior, which in itself might be effective in helping individuals to gain or maintain status. This is in line with Gilbert's (1992) notion of *social attention-holding power*, whereby individuals who are able to direct favourable attention towards themselves are able to increase their status. Finally 'perceived status' is also a proposed factor in the scale. This is simply an individual's evaluation of their own rank within the social world, which would be informative alongside the other proposed factors of this scale. Furthermore, the ability to accurately perceive one's status is important in making assessments about when it might be appropriate to challenge potential competitors for status and when to submit to higher-ranking individuals, particularly since over-estimating one's status can be costly (Anderson, Ames, & Gosling, 2008; Buss, 2008; Eibl-Eibesfeldt, 2007).

Examining all these factors together will allow the development of a Status Consciousness Scale that is broad and multi-faceted. One advantage of having all these potential factors accounted for in one scale is that the investigation can examine awareness of status, as well as attitudes and beliefs about status alongside status-relevant desires and motivation, and self-perceived personal standing. However, all aspects of 'status consciousness' are not argued to be exhaustively addressed here with a comprehensive characterisation of every status-relevant process. Instead, these eight factors complement existing scales and provide a first approach to a broader categorisation of status consciousness. This exploratory study attempts to uncover important basic factors of status consciousness that will serve as a starting point for further research on individual differences relating to social status.

Study 1 administered a pool of questionnaire items to a large sample and used an exploratory factor analysis to select items for the Status Consciousness Scale. Study 2 further

examined the factors found in Study 1 with a confirmatory factor analysis in a new sample, and commenced initial construct validation of the scale.

Study 1: Initial Development of Items for the Status Consciousness Scale

This study involved the development of items addressing the eight proposed factors for the Status Consciousness Scale and their administration to a sample in order to select items for the scale. The aim here was to begin with a conceptualisation of 'status consciousness' incorporating the proposed factors, and then to narrow down to key status-relevant factors through a data-driven approach.

Method

Participants

Participants were recruited through Amazon's MTurk website by inviting them to participate in a survey about social status for a psychology research project. Participation was restricted to people whose location was in the USA. Participants were offered payment of US$1 for the study, which they were told would take 30 minutes to complete. Initially there were 1117 responses, but deleting all incomplete responses and those suspected to be spam left a sample of 1009 participants. The sample was 58.3% female, 963 participants were US citizens and participants had an age range of 18-88 years ($M = 31.39$, $SD = 11.54$).

Materials and Procedure

In order to address concepts within each of the eight proposed factors, preliminary items were written by the lead author with input and revisions from the second and third authors. Item generation for this study was informed by earlier pilot research involving an exploratory factor analysis of 50 original items about beliefs, attitudes, and desires relating to social status (see Appendix A for the full list of items). For each of the eight proposed factors we included 20 items, half of which were reversed-scored, creating a total of 160 items (see

Appendix B for the full list of items). Participants were asked to indicate the degree to which they agreed with or disagreed with each statement on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*). Participants were also asked for their age, gender, country of citizenship and residence, and some other questions of interest to the researcher that will not be reported on here.

The questionnaire was administered using Qualtrics software by providing the link to the survey on the MTurk website. Participants were first presented with the information and consent form, then the 160 items in randomised order for each participant. After the questionnaire, participants were asked for their demographic information, and paid US$1 through MTurk when they had successfully submitted their questionnaire.

Results

An exploratory factor analysis was performed using SPSS version 21 on the 160 items in order to examine whether the eight proposed factors were indeed present in the dataset. This data-driven approach was used due to the exploratory nature of this research, with consideration for the possibility that these items might be summarised more appropriately by alternative factors. Furthermore, this process aimed to reduce this large number of items by identifying the strongest-loading items on each factor to be examined in further analyses.

A maximum likelihood analysis with a Promax rotation (kappa = 4) was used, since it was expected that some of these factors might correlate. This resulted in 13 factors with an eigenvalue greater than one, presented in Table 1. A parallel analysis of PCA eigenvalues (Zwick & Velicer, 1986) was also conducted, which suggested that 17 factors should be retained. However, there were only two items with loadings above .3 on the ninth factor, and each subsequent factor also had few items with strong loadings. The scree plot indicated a definite 'elbow' between the eighth and ninth factor, and the percentage of explained variance lowered substantially by the ninth factor. Therefore, we decided that only the top eight factors would be considered further. These top eight factors explained 39.49% of the

variance. Since the purpose of this study was to select items for a scale of manageable length, and a balanced scale was preferred, only the top five items for each of these eight factors were selected for inclusion. Selecting only the top five items for each factor allowed for the use of items with the strongest loadings and prevented the inclusion of items with weak loadings, since loadings weakened substantially beyond the fifth item for several factors. The loadings for these 40 items in the Status Consciousness Scale are presented in Table 2. The inter-factor correlations of these eight factors are shown in Table 3.

Table 1

Factors with eigenvalues greater than one in the maximum likelihood exploratory factor analysis of the 160 'Status Consciousness' items

Factor	Eigenvalue	% Variance explained
1	31.26	19.54
2	6.85	4.28
3	6.49	4.06
4	5.53	3.46
5	4.76	2.98
6	3.55	2.22
7	2.72	1.70
8	2.02	1.26
9	1.43	0.90
10	1.36	0.85
11	1.21	0.76
12	1.08	0.68
13	1.03	0.64

Table 2

Pattern matrix from the maximum likelihood exploratory factor analysis of the 160 'status consciousness' items with a Promax rotation showing the top five items of the top eight factors found in Study 1

Item	1	2	3	4	5	6	7	8
1. It doesn't matter to me where I stand in the social order.	**.83**	.01	.04	.04	.03	.06	-.02	.06
2. I'm not interested in trying to impress people.	**.78**	.18	-.07	.06	.05	-.01	-.11	-.12
3. I don't spend much time thinking about whether I'm good enough compared to others.	**.75**	.02	-.02	-.02	-.01	-.01	.02	-.02
4. If other people don't see me as something special, it's no big deal.	**.74**	-.07	.01	.05	.03	.03	.11	-.08
5. It doesn't really matter how you compare to others.	**.74**	-.05	.04	.10	.00	-.03	-.09	.19
6. The people lower than me in a hierarchy can expect that I will treat them as such.	.14	**.84**	.03	.15	-.05	-.02	-.11	-.05
7. When I meet someone I notice the ways in which I'm better than them.	-.11	**.75**	-.07	.03	.04	.01	.02	.02
8. If you aren't at the top, you are nothing.	.09	**.74**	-.05	.09	.03	-.03	-.08	-.11
9. When someone else does well, I can always think of a way in which I'm better than them.	-.06	**.72**	-.04	-.02	-.04	-.01	.03	-.03
10. I often feel as though others are beneath me.	.01	**.69**	-.06	.02	-.05	.01	-.12	-.06
11. Everybody should respect their superiors.	.05	-.06	**.74**	-.01	-.03	.01	.01	.03
12. Just because somebody ranks above you, it doesn't mean you owe them any extra respect.	.08	.03	**-.68**	.01	-.01	.01	.07	-.01
13. There is no obligation to treat those who rank higher than you as superior.	.05	.02	**-.60**	.00	-.02	-.02	.05	-.09
14. I do what is expected of me by those with a higher authority.	-.05	-.20	**.60**	.00	.04	-.01	.12	-.03
15. The people who rank above you in a hierarchy should be treated in a way that is appropriate to their higher position.	.06	**.35**	**.58**	.00	.01	.09	.12	-.16
16. I don't think I've ever achieved anything particularly extraordinary.	.06	.11	-.03	**.74**	.04	-.03	-.04	.02
17. I don't think I rank very high in the world.	.04	-.03	-.02	**.69**	.01	.04	.13	.11
18. I'm nothing special compared to everyone else.	.06	.13	-.03	**.67**	.04	.01	-.04	.02
19. When I compare my life to others peoples' lives, I sometimes feel like a loser.	-.11	.09	.00	**.66**	-.06	.03	.01	.05

Item								
20. I struggle to find anything that I'm the best at.	-.09	.24	.01	**.62**	.02	.00	-.01	.05
21. When I succeed at something, I like to tell people about it.	-.03	-.01	.02	.01	**.95**	.05	.01	.01
22. I like telling other people when something good happens to me.	-.06	.06	-.01	-.02	**.83**	.04	.08	-.07
23. I like telling other people about my achievements.	-.07	-.02	.03	.00	**.77**	.03	.02	-.05
24. When I achieve something, I tend to keep quiet about it.	-.13	-.14	-.01	.00	**-.74**	-.02	-.01	-.07
25. I don't need to go telling everyone when something good happens to me.	-.12	.02	.04	-.02	**-.67**	.01	-.01	-.09
26. I prefer it if everybody is equal.	.06	.02	-.02	.05	.00	**.83**	-.14	.00
27. Everyone should be striving to make the world a more equal place.	-.09	.02	.03	-.04	.01	**.82**	-.04	-.10
28. I wish there was true equality in the world.	.08	.03	-.04	.03	-.02	**.80**	-.10	.02
29. We don't need to try to make the world a more equal place.	.08	.25	.00	.00	.00	**-.75**	.06	.00
30. People who have more in life should sacrifice some of what they have to improve the lives of people who have less.	.08	.05	.06	.02	.09	**.47**	-.11	.02
31. The world is never going to be equal because some people will always do better than others.	.02	-.14	.01	.10	.05	-.16	**.69**	-.04
32. It's only natural that some people get ahead of others in life.	.08	-.04	.06	-.04	.01	-.08	**.61**	-.03
33. There's nothing wrong with the fact that some people are better off than others.	.11	.03	.00	-.01	.05	-.23	**.56**	.02
34. It's natural for people to want to be better than others.	-.08	.02	.04	.04	.09	.05	**.54**	.03
35. If I don't make something out of myself it's my own fault.	.10	-.22	-.01	-.01	.01	-.03	**.52**	.04
36. It feels good when other people are in awe of me.	.00	-.02	.00	-.02	.00	-.02	-.03	**.84**
37. It feels nice to be envied.	.02	.17	-.06	.02	.04	.00	.10	**.74**
38. I enjoy being the object of people's envy.	-.01	**.30**	-.06	.02	.02	.00	.05	**.70**
39. I get a rush out of feeling other people's admiration.	-.01	.08	.05	.07	-.10	.03	-.01	**.59**
40. I like the idea of being an important person.	-.15	-.03	-.03	-.04	.00	-.07	-.05	**.55**

Note. Items with loadings of .3 and above are shown in bold. Factors in order of appearance in the table are: *rejection of status, high-perceived status, respect for hierarchy, low-perceived status, status display, egalitarianism, belief in hierarchy,* and *enjoyment of status.*

The means and other descriptive statistics for each of these scale factors are shown in Table 4. The mean scores were calculated by adding up the total score for each factor and dividing by the number of items on each factor. The factors appear in the same order as Table 2, and each one has been named according to the construct it appears to measure.

Table 3

Inter-factor correlations of the first eight factors from the maximum likelihood analysis

	1	2	3	4	5	6	7	8
1	1	-	-	-	-	-	-	-
2	-.47	1	-	-	-	-	-	-
3	-.27	.39	1	-	-	-	-	-
4	-.02	-.03	.06	1	-	-	-	-
5	.37	-.21	-.12	.23	1	-	-	-
6	.18	-.21	-.17	.10	-.09	1	-	-
7	-.26	.28	.22	-.07	-.31	-.14	1	-
8	-.56	.48	.24	-.08	-.55	-.02	.52	1

*p < .05, two-tailed
**p < .01, two-tailed
Note. Factors in order of appearance in the table are: *rejection of status, high-perceived status, respect for hierarchy, low-perceived status, status display, egalitarianism, belief in hierarchy,* and *enjoyment of status.*

Table 4

Descriptive statistics for the eight factors of the Status Consciousness Scale

	Study 1		Study 2	
	Mean (*SD*)	Cronbach's α	Mean (*SD*)	Cronbach's α
Rejection of status	4.72 (1.56)	0.83	4.76 (1.13)	0.81
High-perceived status	2.78 (1.08)	0.80	2.67 (1.08)	0.80
Respect for hierarchy	3.83 (1.02)	0.76	3.93 (1.12)	0.83
Low-perceived status	3.93 (1.22)	0.78	3.96 (1.29)	0.80
Status display	3.96 (1.14)	0.85	3.97 (1.17)	0.87
Egalitarianism	4.98 (1.28)	0.86	5.10 (1.28)	0.87
Belief in hierarchy	5.12 (0.91)	0.70	5.00 (1.01)	0.76
Enjoyment of status	4.04 (1.26)	0.85	3.88 (1.36)	0.90

Discussion

The eight factors that were expected to arise based on pilot data were: *awareness of hierarchy*, *belief in hierarchy*, *respect for hierarchy, status drive*, *status anxiety*, *enjoyment of status*, *status display*, and *perceived status*. After the analysis, eight factors were included: *rejection of status*, *high-perceived status*, *respect for hierarchy*, *low-perceived status, status display, egalitarianism, belief in hierarchy*, and *enjoyment of status*.

Some of the proposed factors arose as predicted, including *respect for hierarchy, status display, belief in hierarchy,* and *enjoyment of status*. It was predicted that *perceived status* would form a single factor, but surprisingly, *high-perceived status* and *low-perceived*

status arose as two separate factors. The *high-perceived status* factor contained items indicating a sense of superiority and a negative view of others, whereas the *low-perceived status* factor seemed to indicate not seeing oneself as being above ordinary in any way. The items in the '*egalitarianism*' factor came largely from the reverse-scored items in the proposed '*belief in hierarchy*' factor. *Rejection of status* included items from the proposed *belief in hierarchy, status anxiety, status drive,* and *status display* factors. Neither the '*status drive*' nor the '*awareness of hierarchy*' factors were in evidence. There were two items that cross-loaded on factor 2, however neither of these were greater than .4 and were therefore not considered to be any cause for concern. The Cronbach's alphas for each factor (Table 4) suggest that the items in each of these factors reliably measure their respective underlying constructs.

In summary, half of the proposed factors emerged as expected, while items from some factors loaded in unexpected ways. The factors that arose are nonetheless meaningful, and therefore worthy of further examination, particularly since they were generally in line with the proposed factors. These items were therefore administered to a new sample in order to determine whether this model would be supported by a confirmatory factor analysis, and to examine the relationship that these factors have with existing status-relevant measures.

Study 2: Preliminary Examination of Construct Validity of the Status Consciousness Scale

In order to further investigate the factors found in Study 1, the 40-item Status Consciousness Scale was administered to a new sample along with measures of self-esteem, social dominance orientation (SDO), competitiveness, social comparison orientation, overt narcissism, covert narcissism, and assertiveness in order to examine the scale's convergent validity. This study also aimed to determine whether the scale derived in Study 1 would be supported by a confirmatory factor analysis.

Given that *rejection of status* entails a disinterest in both social status and how one compares with others, it was predicted to correlate negatively with competitiveness and social comparison orientation. This factor was also predicted to correlate negatively with overt (NPI) narcissism, since narcissism involves a sense of superiority and grandiosity (Raskin & Terry, 1988), and therefore individuals high on narcissism should not reject status concerns. A measure of covert narcissism was also included, since individuals high on covert narcissism are also known to be preoccupied with status-concerns. However, covert narcissists tend to keep their grandiosity and concern with status hidden, and may even avoid competitive situations (Akhtar, 2000). Therefore this form of narcissism was also expected to correlate with *rejection of status*. However this correlation was predicted to be weaker than that with overt narcissism, since overt narcissists should be less likely to reject status concerns than covert narcissists.

High-perceived status was predicted to correlate positively with overt narcissism and covert narcissism, since much like both these characteristics, this factor entails a feeling of superiority compared to others (Akhtar, 2000; Raskin & Terry, 1988). Once again it was expected that the correlation with covert narcissism would be weaker than that with overt narcissism. *High-perceived status* was also predicted to correlate positively with self-esteem and assertiveness, since those who see themselves as superior to others should have a high opinion of themselves and behave accordingly, in line with Barkow's (1989) evolutionary argument that our self-esteem derives from our own sense of status, which has its basis in primate dominance. Conversely, *low-perceived status* was expected to correlate negatively with self-esteem and assertiveness, since those who view themselves as inferior to others should show the opposite pattern to those who perceive themselves to be superior.

Status display was predicted to correlate positively with competitiveness, since people with a competitive nature are driven to outperform others (Houston et al., 2002), and thus they are likely to want to communicate their success to others. It was also predicted to correlate positively with overt narcissism, since those with a narcissistic sense of superiority

and grandiosity (Akhtar, 2000; Raskin & Terry, 1988) are likely be motivated to display signs of high status. It was predicted to also correlate positively with covert narcissism, again to a slightly lesser degree.

Along similar lines, overt narcissism and covert narcissism were expected to correlate positively with *enjoyment of status,* since individuals high on narcissism enjoy the idea of being considered special and superior (Akhtar, 2000; Raskin & Terry, 1988). Once again, the correlation with covert narcissism was predicted to be weaker than that with overt narcissism. *Enjoyment of status* was also predicted to correlate positively with competitiveness, since the drive to outperform others entailed in competitiveness (Houston et al., 2002) is likely to be associated with enjoyment of the benefits of high status.

Since SDO is a preference for inequality among social groups (Pratto et al., 1994), we predicted that it would correlate positively with *respect for hierarchy,* which is the belief that one should respect higher-ranking people. SDO was also predicted to correlate positively with *belief in hierarchy,* which involves the belief that inequality between groups is natural and good. For similar reasons, *egalitarianism* was expected to correlate negatively with SDO, since those who prefer equality between individuals are suggested to dislike inequality between groups.

As mentioned earlier, evolutionary theory predicts that because men have greater reproductive benefits from having high status, and therefore they are predicted to be higher on status striving than women (Buss, 2008; Cummins, 2006). Thus we predicted that men would be more status-oriented than women and score higher on *high-perceived status, respect for hierarchy, status display, belief in hierarchy* and *enjoyment of status,* and lower on *rejection of status*, *low-perceived status*, and *egalitarianism.*

Method

Participants

Participants in Study 2 were recruited through Amazon's MTurk website and once again participation was restricted to people whose location was in the USA. Participants were offered payment of US$1 for participation in the study, which they were told would take 30 minutes to complete. There were 303 participants of whom 50.8% were female and 298 were US citizens. The sample had an age range of 18-72 years (*M* = 38.23, *SD*= 13.54).

Materials and Procedure

Participants were provided with the link to the survey on the MTurk website. They were first asked to complete the 40-item Status Consciousness Scale in randomised order, and then the following scales presented in randomised order for each participant:

Self-Esteem. The Rosenberg Self-Esteem scale (Rosenberg, 1965) is a 10-item scale. Participants rate how much they agree or disagree with each statement (e.g. "On the whole, I am satisfied with myself") on a scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*).

Social Dominance Orientation. The SDO scale (Pratto et al., 1994) has 16 items. Participants respond to items (e.g. "Inferior groups should stay in their place") on a scale ranging from 1 (*very negative*) to 7 (*very positive*).

Competitiveness. The 14-item Revised Competitiveness Index (Houston et al., 2002) was used to measure competitiveness. Participants rate how much they agree or disagree with each statement (e.g. "I like competition") on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Interpersonal Dominance. The Assertiveness scale from the IPIP (Goldberg et al., 2006) was used to measure interpersonal dominance. The scale has 10 items and participants are asked how well each statement (e.g. "Try to lead others") describes them on a scale ranging from 1 (*very inaccurate*) to 5 (*very accurate*).

Social Comparison Orientation. Social Comparison Orientation was measured using the Iowa-Netherlands Comparison Orientation Measure (INCOM) (Gibbons & Buunk,

1999). The scale has 11 items. Participants indicate how much they agree or disagree with each statement (e.g. "If I want to find out how well I have done something, I compare what I have done with how others have done") on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Overt narcissism. Overt narcissism was measured using the NPI (Raskin & Terry, 1988). The scale has 40 items where participants are asked to choose which of two options best describe them (e.g. A. "The thought of ruling the world frightens the hell out of me" or B. "If I ruled the world it would be a better place"), where the more narcissistic option is scored one point.

Covert narcissism. The Hypersensitive Narcissism scale (Hendin & Cheek, 1997) is a 10-item true or false questionnaire (e.g. "When I enter a room I often feel self-conscious and feel that the eyes of others are upon me") that measures covert narcissism, where every "true" response is scored one point.

The order of items within scales was randomised by Qualtrics for each participant. After the presentation of all measures, participants were asked for their demographic information and were paid US$1 through MTurk when they had successfully submitted their questionnaire.

Results

A confirmatory factor analysis was performed on the Status Consciousness Scale using AMOS, where covariances were added between factors that had an inter-correlation greater than .3. The analysis found that the model fit was satisfactory on some fit indices, although weak on others; $\chi^2 (731) = 1678.694$, $p < .001$, $\chi^2/df = 2.296$, SRMR = .112, TLI = .834, CFI = .844, RMSEA = .066. The model is presented in Figure 1. All path coefficients were significant.
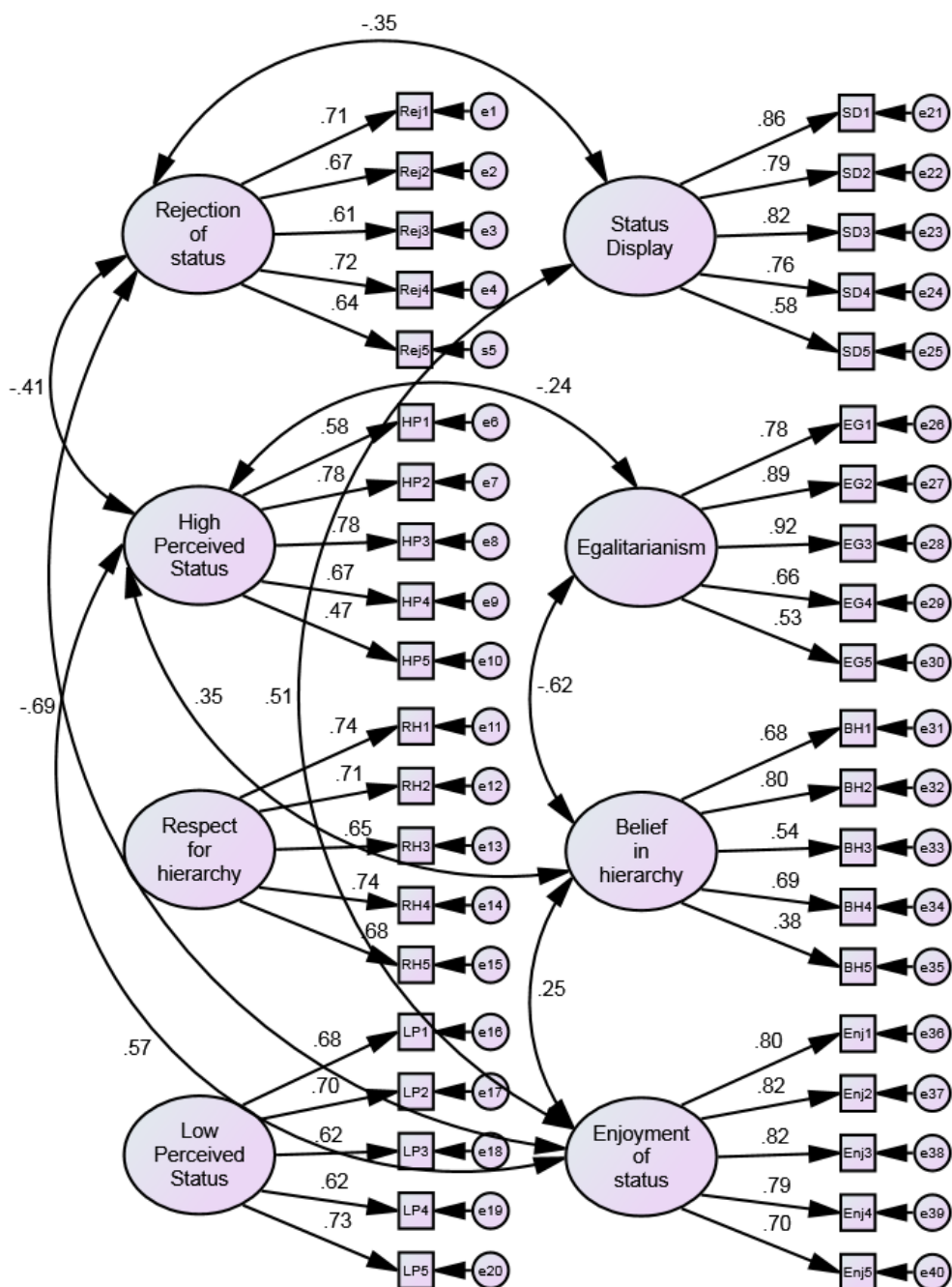
Figure 1. Path model for the 'Status Consciousness Scale' in Study 2 showing standardised path coefficients.

Table 5

Correlations between factors on the Status Consciousness Scale and measures in Study 2

	Rejection of status	High-perceived status	Respect for hierarchy	Low-perceived status	Status display	Egalitarianism	Belief in hierarchy	Enjoyment of status	Self-esteem	SDO	Competitiveness	Assertiveness	INCOM	NPI	Hypersensitive Narcissism
Rejection of status	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
High-perceived status	-.41**	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Respect for hierarchy	-.15**	.19**	1	-	-	-	-	-	-	-	-	-	-	-	-
Low-perceived status	-.04	-.02	.02	1	-	-	-	-	-	-	-	-	-	-	-
Status display	-.37**	.24**	.10	-.16**	1	-	-	-	-	-	-	-	-	-	-
Egalitarianism	.14*	-.34**	-.11	.07	-.08	1	-	-	-	-	-	-	-	-	-
Belief in hierarchy	-.19**	.35**	.27**	.00	.22**	-.55**	1	-	-	-	-	-	-	-	-
Enjoyment of status	-.61**	.58**	.22**	-.09	.56**	-.21**	.43**	1	-	-	-	-	-	-	-
Self-esteem	.22**	-.06	.03	-.67**	.09	-.08	.05	-.03	1	-	-	-	-	-	-
SDO	-.22**	.48**	.21**	-.04	.14*	-.77**	.49**	.29**	.03	1	-	-	-	-	-
Competitiveness	-.28**	.41**	.00	-.38**	.29**	-.22**	.35**	.43**	.20**	.23**	1	-	-	-	-
Assertiveness	-.05	.12*	-.04	-.54**	.25**	-.09	.20**	.29**	.48**	.09	.53**	1	-	-	-
INCOM	-.55**	.33**	.26**	.11	.38**	.04	.24**	.55**	-.27**	.08	.18**	-.01	1	-	-
NPI	-.28**	.48**	.02	-.47**	.34**	-.19**	.23**	.53**	.30**	.29**	.59**	.64**	.13*	1	-
Hypersensitive Narcissism	-.38**	.33**	.02	.32**	.23**	-.11	.19**	.36**	-.39**	.16**	.03	-.20**	.36**	.14*	1

*$p < .05$, two-tailed
**$p < .01$, two-tailed

The means and other descriptive statistics for each of these factors are shown in Table 4. The correlations between the factors on the Status Consciousness Scale and the other personality scales are shown in Table 5.

Discussion

The confirmatory factor analyses shows that the model was a satisfactory fit to the data, providing further support for the model derived in Study 1, where items selected for the Status Consciousness Scale are modelled by eight factors. Results for the correlations between the scale factors and other personality traits were reasonably consistent with expectations, and are discussed below. Unless relevant to hypotheses, weak correlations are not discussed.

As expected, there was a strong negative correlation between *rejection of status* and social comparison orientation. There were also moderate negative correlations between *rejection of status* with competitiveness, and overt and covert narcissism, as predicted. The correlation with covert narcissism was stronger than that with overt narcissism, contrary to predictions, however this difference was not significant; $t(300) = 1.47$, $p = $ n.s.. This suggests that covert narcissists are less likely to reject status concerns than overt narcissists, which is contrary to the expectation that they should be less open about their concern with status than narcissists (Akhtar, 2000).

There was a strong positive correlation between *high-perceived status* and overt narcissism, and a moderate positive correlation with covert narcissism, as predicted. However, the predicted positive correlation between *high-perceived status* and assertiveness was significant but very weak. This might be because the sense of superiority entailed in this factor does not necessarily extend to the tendency to control or lead others that is measured in the assertiveness scale. Contrary to predictions, *high-perceived status* did not correlate with self-esteem, suggesting that high self-esteem does not necessarily entail a belief in one's own

superiority. The strong positive correlation between *high-perceived status* and SDO was not predicted. However, previous research found that SDO correlated negatively with concern for others (Pratto et al., 1994), supporting the notion that SDO entails a sense of superiority that is also inherent within *high-perceived status*. This factor also had moderate positive correlations with competitiveness and social comparison orientation, which while they were not predicted, form a coherent pattern; people who view themselves as being high-status are more likely to be competitive and be concerned with how they compare to others.

As predicted, there were strong negative correlations between *low-perceived status* and both self-esteem and assertiveness. There was also a moderate negative correlation with competitiveness that was not predicted, however this suggests that those who perceive themselves as low status prefer to avoid competitive situations, possibly because they do not feel confident about succeeding within them. There was also a strong negative correlation between *low-perceived status* and overt narcissism that was not predicted; however it makes sense that such narcissists, being grandiose, do not see themselves as inferior to others. On the other hand, *low-perceived status* had a moderate positive correlation with covert narcissism that was also not predicted. However, this is consistent with evidence that covert narcissists, unlike overt narcissists, hide their sense of grandiosity and are outwardly modest and self-effacing (Akhtar, 2000; Dickinson & Pincus, 2003).

There was a moderate positive correlation between *status display* with overt narcissism and competitiveness, as predicted. This is likely to reflect that the desire to display one's success is stronger in those who are driven to outperform others (Houston et al., 2002) and those with a sense of superiority and grandiosity (Akhtar, 2000; Raskin & Terry, 1988). Also as predicted, the positive correlation with covert narcissism was weaker than that with overt narcissism. *Status display* also had a moderate positive correlation with social comparison orientation that was not expected. However, this might be the case because

underlying the desire to communicate signs of high status is a preoccupation with how one compares to others.

Enjoyment of status had a strong positive correlation with overt narcissism and a moderate positive correlation with covert narcissism, as expected. As predicted, *enjoyment of status* also had a moderate positive correlation with competitiveness. The strong positive correlation with social comparison orientation was not predicted, but it forms a coherent picture that those who enjoy the thought of high status are also preoccupied with making social comparisons, since this is one means by which they acquire information about their status. *Enjoyment of status* also had moderate positive correlations with assertiveness and SDO that were not predicted, suggesting that these individuals also have the tendency to be interpersonally dominant and endorse inequality between groups.

SDO had a strong negative correlation with *egalitarianism* and a strong positive correlation with *belief in hierarchy,* as predicted. Furthermore, as predicted, there was a positive correlation between SDO and *respect for hierarchy,* however this correlation was weak. The '*respect for hierarchy*' factor measures respect for one's superiors within a hierarchy. If, as discussed above, SDO entails a sense of superiority, people high on SDO might not feel they have superiors to respect; thus there may be a ceiling effect restricting correlation. However, the positive correlation found is in line with the endorsement of inequality entailed in SDO (Pratto et al., 1994). *Belief in hierarchy* also had a moderate positive correlation with competitiveness that was not predicted, however competitiveness is consistent with the belief that high status in hierarchies is rightfully earned by those who are skilled in obtaining it.

Overall, the correlations between the factors of the Status Consciousness Scale and existing status-relevant measures were mostly as predicted. In the instances where unexpected correlations occurred, findings were generally interpretable, and in line with the

conceptualisation of each scale factor. The overall pattern of correlations suggests that the Status Consciousness Scale has good convergent validity.

Gender differences

In both studies, men scored significantly higher on *high-perceived status, belief in hierarchy* and *enjoyment of status*, and significantly lower on *egalitarianism* than women, in line with predictions (see Table 6). Contrary to expectations there were no gender differences on any other

scale factors. Nonetheless, the gender differences we found contribute to the discriminant validity of these scale factors, since evolutionary theory predicts these differences.

There were also significant gender differences on a number of the personality variables measured in Study 2. In Study 2, males scored significantly higher than females on SDO, competitiveness, assertiveness, and overt narcissism (Table 6). Given that some of these measures correlated reasonably well with some of the scale factors that also had gender differences, these correlations were re-examined while controlling for gender. All except one of the correlations between *enjoyment of status*, *belief in hierarchy, egalitarianism* and *high-perceived status* with SDO, competitiveness, assertiveness, and narcissism that were significant in Study 2 remained significant after controlling for gender. The only exception was the correlation between assertiveness and *high-perceived status*, which was very weak to begin with. This suggests that for the most part, these significant relationships were not simply due to gender differences.

Table 6

Gender differences on scale factors and personality measures in both studies

Measure	Females	Males	*df*	*t*	*d*
	M (*SD*)	*M* (*SD*)			
High-perceived status					
Study 1	2.60 (1.02)	3.02 (1.13)	1007	-6.19***	-0.39
Study 2	2.41 (1.06)	2.95 (1.03)	301	-4.49***	-0.52
Egalitarianism					
Study 1	5.19 (1.17)	4.68 (1.37)	1007	6.35***	0.41
Study 2	5.31 (1.20)	4.90 (1.32)	301	2.83**	0.33
Belief in hierarchy					
Study 1	5.04 (0.88)	5.24 (0.95)	1007	-3.50***	-0.22
Study 2	4.82 (1.00)	5.17 (0.99)	301	-3.04**	-0.35
Enjoyment of status					
Study 1	3.92 (1.28)	4.20 (1.21)	1007	-3.45***	-0.22
Study 2	3.70 (1.41)	4.07 (1.29)	301	-2.39*	-0.27
Study 2					
SDO	2.34 (1.12)	2.68 (1.21)	301	-2.53*	-0.29
Competitiveness	2.70 (0.80)	3.20 (0.78)	301	-5.51***	-0.63
Assertiveness	3.24 (0.82)	3.44 (0.76)	301	-2.11*	-0.25
Narcissism	10.12 (8.06)	13.60 (8.30)	301	-3.70***	-0.43

*$p < .05$, two-tailed
**$p < .01$, two-tailed
***$p < .001$, two-tailed

General Discussion

This study has established a new Status Consciousness Scale, which consists in eight factors that are meaningful and internally consistent. Confirmatory factor analyses supported the model that was deduced from the initial analysis. Study 2 showed that the factors on the scale are distinct from the other traits measured, with the possible exception of the factor *egalitarianism*, which had a strong negative correlation with SDO, and *low-perceived status*, which had a strong negative correlation with self-esteem. The correlations between the factors on the Status Consciousness Scale and the other scales suggest that the scale has good convergent validity.

The distinction between the two factors *high-perceived status* and *low-perceived status* became clearer through their pattern of correlations with the personality variables. For instance, *low-perceived status* correlated negatively with self-esteem, whereas *high-perceived status* did not correlate with self-esteem. This suggests that self-esteem entails not seeing oneself as inferior to others, but does not necessarily entail seeing oneself as superior to others. Similarly, assertiveness correlated negatively with *low-perceived status*, but had a very weak positive correlation with *high-perceived status*. Thus *low-perceived status* captures the element of submissiveness, but *high-perceived status* has little relation to interpersonal dominance. *High-perceived status* correlated positively with SDO and social comparison orientation, but *low-perceived status* did not correlate with either variable. Competitiveness and overt narcissism both correlated positively with *high-perceived status* suggesting that this factor taps into competitiveness and grandiosity, while *low-perceived status* had the opposite pattern. Interestingly, covert narcissism correlated positively with both *high-perceived status* and *low-perceived status*. This is consistent with knowledge of covert narcissists, who, on one level have a sense of grandiosity, but who also display insecurity and modesty (Akhtar, 2000; Dickinson & Pincus, 2003). In every other case, the correlations that overt narcissism and covert narcissism had with the Status Consciousness

Scale factors showed a reasonably similar pattern to one another, indicating that it is this sense of avowed inferiority that distinguishes overt and covert narcissists on the scale.

One of the limitations of these studies is that we have only provided a preliminary validation of the Status Consciousness Scale, and there is still more validation needed, such as examining the temporal stability of the scale. One aspect of discriminant validity was shown through gender differences, but further examinations of discriminant validity could be examined by perhaps comparing scores on the scale in different occupational groups. Predictive validity must also be shown to examine whether the scale factors correlate with particular behaviours in status hierarchies in line with what the constructs measure. For example, do people who score highly on *respect for hierarchy* actually respect their superiors while treating people who have lower status than them with contempt? Another limitation of this study is that participants were recruited only from the USA, meaning that the factor structure might only hold in this population. Future research could explore the nature of status consciousness in other cultures, as well as relationships with further relevant dimensions (known to relate to SDO (Pratto et al., 1994)), such as political preferences, values, career choices, and socio-economic status. The scale may also relate to emotion and well-being, since previous research has found that concern with social rank (particularly avoiding social inferiority) relates to psychopathology (Gilbert, McEwan, Bellew, Mills, & Gale, 2009). Lastly, we proposed a *status drive* factor for inclusion in our scale, but this factor did not emerge in our exploratory factor analysis. The analysis did reveal a *rejection of status* factor, which is in some ways the converse of *status drive*. Nonetheless, future research should attempt to develop a direct measure of the drive for status, since this drive is central to gaining status in hierarchies.

These explorations of status consciousness provide new information about existing personality constructs, and offer a valuable starting point for further research. While the Status Consciousness Scale might be useful in studies requiring measures of multiple status-

relevant constructs, future research might also simply make use of particular factors rather than the entire scale if not all factors are relevant to a particular research question. Individual factors of interest could also be expanded and developed into fully validated scales. The correlations presented in Study 2 give a preliminary picture of the nature of these factors, which could guide future research in selecting those factors of interest. Overall, these results suggest that the factors on the Status Consciousness Scale relate in predictable ways with allied variables, and open up a new comprehensive way of assessing individual differences in views of and concern for personal social standing.

References

Adler, N. E., Boyce, T., Chesney, M. A., Cohen, S., Folkman, S., Kahn, R. L., & Syme, S. L. (1994). Socioeconomic status and health: The challenge of the gradient. *American Psychologist, 49*, 15-24.

Akhtar, S. (2000). The shy narcissist. In J. Sandler, R. Michels & P. Fonagy (Eds.), *Changing ideas in a changing world: The revolution in psychoanalysis - Essays in honour of Arnold Cooper* (pp. 111-119). New York: Karnac.

Anderson, C., Ames, D. R., & Gosling, S. D. (2008). Punishing hubris: The perils of overestimating one's status in a group. *Personality and Social Psychology Bulletin, 34*, 90-101.

Anderson, C., Hildreth, J. A. D., & Howland, L. (2015). Is the desire for status a fundamental human motive? A review of the empirical literature. *Psychological Bulletin, 141*, 574-601.

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.

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: Garland STPM Press.

Barkow, J. H. (1989). *Darwin, sex, and status: Biological approaches to mind and culture*. Toronto: University of Toronto Press.

Berger, J., Cohen, B. P., & Zelditch, M., Jr. (1972). Status characteristics and social interaction. *American Sociological Review, 37*, 241-255.

Buss, D. M. (2008). *Evolutionary psychology: The new science of the mind* (3rd ed.). Boston: Pearson/Allyn and Bacon Publishers.

Cummins, D. D. (2006). Dominance, status, and social hierarchies. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 676-697). Hoboken, NJ: Wiley.

De Botton, A. (2005). *Status anxiety*. New York: Vintage.

Dickinson, K. A., & Pincus, A. L. (2003). Interpersonal analysis of grandiose and vulnerable narcissism. *Journal of Personality Disorders, 17*, 188-207.

Eibl-Eibesfeldt, I. (1970). *Ethology: The biology of behavior*. New York: Holt, Rinehart and Winston.

Eibl-Eibesfeldt, I. (2007). *Human ethology*. New York: Transaction Publishers.

Ellis, L. (1995). Dominance and reproductive success among nonhuman animals: A cross-species comparison. *Ethology and Sociobiology, 16*, 257-333.

Faris, R., & Felmlee, D. (2011). Status struggles: Network centrality and gender segregation in same- and cross-gender aggression. *American Sociological Review, 76*, 48-73.

Fournier, M., Moskowitz, D., & Zuroff, D. (2002). Social rank strategies in hierarchical relationships. *Journal of Personality and Social Psychology, 83*, 425-433.

Gibbons, F. X., & Buunk, B. P. (1999). Individual differences in social comparison: Development of a scale of social comparison orientation. *Journal of Personality and Social Psychology, 76*, 129-142.

Gilbert, P. (1992). *Depression: The evolution of powerlessness*. New York: The Guilford Press.

Gilbert, P., Broomhead, C., Irons, C., McEwan, K., Bellew, R., Mills, A., . . . Knibb, R. (2007). Development of a striving to avoid inferiority scale. *British Journal of Social Psychology, 46*, 633-648.

Gilbert, P., McEwan, K., Bellew, R., Mills, A., & Gale, C. (2009). The dark side of competition: How competitive behaviour and striving to avoid inferiority are linked to depression, anxiety, stress and self-harm. *Psychology & Psychotherapy: Theory, Research & Practice, 82*, 123-136.

Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. G. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality, 40*, 84-96.

Hawley, P. H. (2002). Social dominance and prosocial and coercive strategies of resource control in preschoolers. *International Journal of Behavioral Development, 26*, 167-176.

Hendin, H. M., & Cheek, J. M. (1997). Assessing hypersensitive narcissism: A reexamination of Murray's Narcism Scale. *Journal of Research in Personality, 31*, 588-599.

Hogan, R., & Hogan, J. (1991). Personality and status. In D. G. Gilbert & J. J. Connolly (Eds.), *Personality, social skills, and psychopathology: An individual differences approach* (pp. 137–154). New York: Springer.

Houston, J., Harris, P., McIntire, S., & Francis, D. (2002). Revising the Competitiveness Index using factor analysis. *Psychological Reports, 90*, 31-34.

Kalma, A. (1991). Hierarchisation and dominance assessment at first glance. *European Journal of Social Psychology, 21*, 165-181.

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review, 110*, 265-284.

Lease, A. M., Musgrove, K. T., & Axelrod, J. L. (2002). Dimensions of social status in preadolescent peer groups: Likability, perceived popularity, and social dominance. *Social Development, 11*, 508-533.

Lovaglia, M., & Houser, J. (1996). Emotional reactions and status in groups. *American Sociological Review, 61*, 867-883.

Mast, M. S. (2010). Interpersonal behaviour and social perception in a hierarchy: The interpersonal power and behaviour model. *European Review of Social Psychology, 21*, 1-33.

Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social Dominance Orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*, 741-763.

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.

Ridgeway, C. L., & Diekema, D. (1989). Dominance and collective hierarchy formation in male and female task groups. *American Sociological Review, 54*, 79-93.

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

Savin-Williams, R. C. (1979). Dominance hierarchies in groups of early adolescents. *Child Development, 50*, 923-935.

Siegrist, J., & Marmot, M. (2004). Health inequalities and the psychosocial environment - two scientific challenges. *Social Science and Medicine, 58*, 1463-1473.

von Rueden, C. (2014). The roots and fruits of social status in small-scale human societies. In J. T. Cheng, J. L. Tracy & C. Anderson (Eds.), *The psychology of social status* (pp. 179-200). New York: Springer.

Zuroff, D. C., Fournier, M. A., Patall, E. A., & Leybman, M. J. (2010). Steps toward an evolutionary personality psychology: Individual differences in the social rank domain. *Canadian Psychology, 51*, 58-66.

Zwick, W. R., & Velicer, W. F. (1986). Comparison of five rules for determining the number of components to retain. *Psychological Bulletin, 99*, 432.

Introduction to Chapter 3

Individual differences in the desire for status and perceived superiority: The creation of a "Desire for Status Scale"

As seen in the previous chapter, the Status Consciousness Scale successfully distinguished and validated a broad range of novel status-relevant attitudes, beliefs, and desires. While not every one of our predicted factors emerged after our analysis, we ended up with a scale measuring eight meaningful "status consciousness" factors that appeared to be valid and reliable after our preliminary analyses. We used evolutionary theory to derive the proposed scale factors, although we acknowledge that there might be many more status-relevant factors yet to be measured. Furthermore, we did not consider in detail how evolutionary theory might explain individual differences on each of the factors, but argued that such status-relevant capacities would have some impact on how well individuals manage within status hierarchies.

The following study narrowed in on one characteristic that we argue is of particular adaptive significance – the desire for status. In the development of the Status Consciousness Scale, we predicted that there would be a *status drive* factor, which was intended to measure how much people are driven to attain high status. While such a factor did not manifest in the exploratory factor analysis, nevertheless, a factor that did arise was *rejection of status*. This factor is related to the lack of concern for high status, which is in some sense the opposite of the desire for status. Thus this factor guided the conceptual development of a new scale measuring the desire for status. In this chapter we argue why the desire for status is of particular evolutionary importance, and why evolutionary theory would predict individual differences in the desire for status.

Chapter 3

Individual differences in the desire for status and perceived superiority: The creation of a

"Desire for Status Scale"

Abstract

This study assesses the psychometric properties and validity of a newly developed "Desire for Status Scale" measuring individual differences in the desire for status, and an additional factor measuring perceived superiority. Unlike previous scales, this scale offers a direct measure of the desire for status that is not limited to any particular type of strategy for gaining status. A pool of potential items was administered to an online sample ($n = 749$). From this analysis, eight items were selected for the scale. The 8-item scale was administered to a new sample ($n = 303$) alongside a number of other measures of individual differences including striving to avoid inferiority (Gilbert et al., 2007), assertiveness (Goldberg et al., 2006), dominance and prestige (Cheng, Tracy, & Henrich, 2010), social dominance orientation (Pratto, Sidanius, Stallworth, & Malle, 1994), competitiveness (Houston, Harris, McIntire, & Francis, 2002), social comparison orientation (Gibbons & Buunk, 1999), overt narcissism (Raskin & Terry, 1988), covert narcissism (Hendin & Cheek, 1997), and self-esteem (Rosenberg, 1965). These scales were used to assess various facets of validity, and the pattern of correlations was largely consistent with expectations. This new Desire for Status Scale offers a short, efficient, and freely available scale of the desire for status that would be useful in social and evolutionary psychology studies of social status.

"If there were ever a reasonable candidate for a universal human motive, status striving would be at or near the top of the list." (Buss, 2008, p. 356)

Status hierarchies are ubiquitous across human cultures, and even the most egalitarian societies in the world expend a great deal of effort in suppressing the attempts of upstarts looking to dominate the group (Boehm, 1999; Mazur, 1985). While the extent to which societies are hierarchical varies across cultures and across time (Boehm, 1999; De Botton, 2005; Eibl-Eibesfeldt, 2007; von Rueden, 2014), status hierarchies range from those that are institutionally formalised to those arising spontaneously in social interactions (Cheng, Weidman, & Tracy, 2014). In fact, dominance hierarchies are found even amongst children two years-old and younger (Russon & Waite, 1991; Strayer & Trudel, 1984), and throughout the animal world. The dominance hierarchies of our closest living relatives, the chimpanzees, have been closely studied (De Waal, 2007), as have those in many other species, from mammals to invertebrates (Cote & Festa-Bianchet, 2001; Ellis, 1995).

Evolutionary theory has helped us understand why status is important in humans and in other animals. From an adaptive viewpoint, it is clear why humans should be concerned with their status. High rank within a social hierarchy is likely to provide greater access to food, protection, allies, and mating partners (Buss, 2008; Cummins, 2006). Men in particular have more to gain from having high status than women. A high-status man's greater access to resources makes him more attractive to women, and also makes him more capable of competing with other men in order to gain access to women (Buss, 2008; Fletcher, Tither, O'Laughlin, Friesen, & Overall, 2004; Li, Bailey, Kenrick, & Linsenmeier, 2002; Li & Kenrick, 2006; Li, et al., 2013). Therefore high-status men are likely to have more offspring than low-status men, and given that the number of offspring men can produce is limited only by access to fertile women, a man with extremely high status is capable of fathering a great number of children. Women, on the other hand, are limited in the number of offspring they can produce, and are likely to reproduce successfully regardless of their social status.

Research supports this prediction from evolutionary theory that men should be higher in status striving than women (Buss, 2008; Cummins, 2006). Despite this prediction that men should be higher than women on status striving, high status still has survival benefits for women – and importantly, for their children as well – so while gender a difference is predicted, it is still expected that women should desire status, even if that desire might be tempered by social and other pressures.

Recently, Anderson, Hildreth and Howland (2015) have argued that the desire for status is a fundamental and universal human motive, and raise the question as to why there might be individual differences in the strength of the status motive. Buss (2008) argued that the status striving motive may be universal in humans, since selection should favour those who strive for high status. Nonetheless, evolutionary theory would still predict individual differences in the desire for status beyond that due to random variation. As Nettle (2006) argues, normal distributions in personality dimensions can result from fitness costs and benefits related to being either high or low on particular traits, and this argument has found empirical support (Berg, Lummaa, Lahdenpera, Rotkirch, & Jokela, 2014; Gurven, von Rueden, Stieglitz, Kaplan, & Rodriguez, 2014). These "trade-offs" in costs and benefits mean that there are selection effects at both ends of the continuum of various individual differences, thus maintaining heritable variation in traits. Therefore variation in the desire for status might be selected for as a result of costs and benefits associated with both high and low desire for status.

It is not difficult to conceive of costs and benefits at either end of the continuum of the desire for status. As noted earlier, high status striving would make individuals more likely to attain high status for the aforementioned benefits resulting in enhanced survival and reproduction (Buss, 2008; Cummins, 2006; Hopcroft, 2006), while the cost of being low in the desire for status would be a greater likelihood of missing out on these benefits. Nevertheless, being high in the desire for status is potentially costly since the competition for

high status brings the risk of harm from competitors either already occupying that position or striving for that position, as has been shown by the frequent connection between violence and contests for status (Campbell, 2005; Liddle, Shackelford, & Weekes-Shackelford, 2012; Wilson & Daly, 1985). Being low in the desire for status would likely result in individuals avoiding these risks, while its benefits might be greater cooperativeness and agreeableness. Individuals who are higher on cooperativeness and agreeableness are likely to be more desirable as friends and coalition partners (Nettle, 2006), which can carry significant fitness payoffs. Thus with costs and payoffs at either end of the continuum, variation in the desire for status would be expected.

This idea of trade-offs in the status striving motive is also consistent with Nettle's (2006) argument about the effects of fluctuating selection in maintaining variation. Changes in the environment, as well as migration from one environment to another, might affect the propensity towards the establishment and maintenance of status hierarchies. For example, egalitarianism is more common in foraging societies, where resources are more scarce (Boehm, 1999; von Rueden, 2014), however an abundance of resources might present more opportunities for hierarchy differentiation and a lower cost for engaging in competitive behaviour. Fluctuating selection might consequently change the relative fitness of particular traits, and could therefore contribute to variation in the status striving motive.

Selection might have also created psychological mechanisms to adjust the status motive according to an assessment of one's capacity to gain status (Buss, 2008). The best survival and reproductive strategies are contingent upon circumstances, and being high in status striving would be beneficial only as long as the reward that is reaped is greater than the cost incurred. Dependent upon a variety of individual characteristics and circumstances, pursuing high status would be adaptive for some, but risky or fruitless for others. Individuals with a lesser capacity for high status are generally better off accepting their current rank rather than competing to increase it against better-equipped rivals, and should consequently

be lower in status striving behaviours. Therefore, while evolutionary logic might appear to

suggest that the desire for status should be universal due to the survival and reproductive

benefits of high status, this might only be true in the right circumstances. The competition for

status means that if an individual's circumstances are not conducive to status-advancement,

then their desire for status should be tempered.

Research has in fact shown that individuals who self-enhanced their status in groups

were punished by others group members for doing so (Anderson, Ames, & Gosling, 2008),

and that participants intervene against individuals who engage in a dominant attack on

another group member (Ridgeway & Diekema, 1989). If acting above one's status can result

in being socially punished, then some individuals might reduce their status ambitions to avoid

incurring such costs. Studies have also shown that individuals tend to prefer to have lower

rank when they feel they add less value to a group than others (Anderson, Willer, Kilduff, &

Brown, 2012). These responses could be the result of evolved psychological mechanisms and

strategy selector mechanisms specialised to the social rank domain (Fournier, Moskowitz, &

Zuroff, 2002; Zuroff, Fournier, Patall, & Leybman, 2010).

One theory that argues for cognitive adaptations relevant to status is social rank theory

(Gilbert, 1992, 2000). Social rank theory holds that we have evolved specific emotional and

behavioural responses to our perceptions of our social rank. Specifically, the perception that

one is of low rank or inferior to others leads to the tendency to behave submissively in

response. These responses inhibit attempts to gain or maintain a position that a lower-ranked

individual is not able to defend, protecting them from losing further contests for status, and

from the threat of aggression from higher-ranking individuals. In fact, Price and Sloman

(1987) argued that underlying some cases of depression in humans is a yielding strategy that

occurs in response to losing in an agonistic encounter, a response we have in common with

many other animals. This depressive incapacity occurs among many animals in response to

defeat in agonistic encounters, and as such, this behavioural tendency has deep roots in the

primitive structures of our brain. Using this evolutionary argument, depressive responses in humans are seen as a strategy for accepting defeat and a low-ranking position, although more severe forms of depression involve the inability to terminate such responses (Price, Sloman, Gardner, Gilbert, & Rohde, 1994; Sloman & Price, 1987). Research has indeed found that feeling inferior is associated with depression, as well as social anxiety and shame (Cheung, Gilbert, & Irons, 2004; Gilbert, 2000; Gilbert et al., 2007; Zuroff, Fournier, & Moskowitz, 2007). Individual differences in the desire for status could similarly be the result of evolved adaptive responses to experiences within social hierarchies. Furthermore, this association between status and well-being is another important reason why the topic deserves more study.

We would also expect that life history factors such as age (Chisholm et al., 1993) might influence the desire for status. Life history theory holds that efforts invested into survival and reproduction depend on the stage of life, and fitness is maximised when trade-offs in investing in these activities are negotiated optimally (Kaplan & Gangestad, 2005). Once sexual maturity is reached, mating and reproduction become a priority. However, the number of offspring that humans can successfully raise that maximises the fitness of the offspring is limited by the amount of resources parents are able to invest. This trade-off between mating and parental effort means that by a certain age when the optimum number of offspring have been produced, effort is directed towards parenting rather than producing more young (Kaplan & Gangestad, 2005). As a result, the benefits of acquiring high status should be greatest in the younger years when mating partners begin to be acquired and when children are being raised. Thus while high status is beneficial at all stages of life, there should be added pressure to acquire it early in life when mating begins and child-rearing is taking place. Therefore, the benefits of high status would be greatest during the time of early adulthood when the priority to mate and raise children is greatest, and we would expect that the desire for status would be greater among younger adults than older adults.

Scales Relating to Status

Given that the forces of selection might create variation in the desire for status, a measure of individual differences in this desire would be useful to research investigating status hierarchies or status concerns. While some studies have examined the desire for status with individual questions specific to the task groups in their studies (Anderson et al., 2012), these are not validated scales measuring the general desire for status. There are a number of existing scales relating to status, however "status" has been conceptualised in various ways in psychology and other disciplines. For instance, Cheng, Tracy, Foulsham, Kingstone, & Henrich (2013) explain that in social psychology, high status has been defined as being respected or admired, whereas in personality psychology and sociobiology/biology, the term "status" has been used interchangeably with power and dominance (Cheng et al., 2013). Typically, the definition of 'power' specifically entails control over people and/or resources, while 'dominance' addresses the means of gaining power, namely through assertiveness and aggression. In evolutionary psychology, on the other hand, status is characterised by receiving deference and social attention, having influence, and access to valued resources. Within this evolutionary perspective, Henrich and Gil-White (2001) argue that dominance and prestige are two possible strategies for acquiring social status. Dominance involves using coercion, intimidation, and imposition to gain status, whereas prestige is gained by being seen as someone worthy of emulation, or as an attractive coalition partner (Cheng et al., 2013; Henrich & Gil-White, 2001).

If dominance and prestige are two different strategies for gaining status (Cheng et al., 2013; Henrich & Gil-White, 2001), then presumably underlying both strategies is simply the desire for high status. There is thus an important distinction between the *aim* of having high status, and the *strategies* used to achieve that aim. The importance of this distinction is that it helps clarify the definition of 'status' that is the basis for our scale development. Furthermore, Cheng et al. (2013) argue that dominance and prestige are "not types of

individuals, or even, necessarily, traits within individuals" (Cheng et al. 2013, p. 106) and that a person could have both dominance and prestige in different contexts. We agree with this conceptualisation of dominance and prestige as being alternative strategies for gaining status, but argue that underlying both strategies is a general desire for status that could vary between individuals regardless of which strategy is used to gain that status.

Furthermore, from an evolutionary perspective, it makes sense to have a measure of the desire for status that is not specific to the strategy used. If there are fitness advantages in having high status, selection should drive individuals to attain *any* form of high status that is successful in gaining fitness pay-offs. The strategy that is effective for gaining status will depend on the domain in question – and different strategies will be effective depending upon the context in which status is being pursued. For example, striving to be chief of a village requires a different status-seeking strategy than striving to be a renowned artist or a skilled tool-maker. What constitutes high status also differs across social groups and societies, and can change throughout time within societies (Boehm, 1999; De Botton, 2005; Eibl-Eibesfeldt, 2007; von Rueden, 2014). Thus we argue that evolution should favour degrees in the *desire* for status, but the strategies used for gaining that status should be flexible according to individual and social circumstances. Therefore we aimed in the present study to develop a scale measuring the desire for status that is not limited to any particular strategy for gaining status. High status, as used in the present study may involve having respect, admiration, influence, access to valued resources, power, dominance, prestige, or any combination of these factors. These are potential, but not necessary, components of status and could occur in various combinations in people with high status. Furthermore, status in this conceptualisation is not limited to that which is institutionally formalised, but can also include status that arises spontaneously in social interactions (Cheng et al., 2014). Therefore our scale conceptualises status in this broad way, and aims to be useful to researchers who want to

measure this desire for status in a broad range of contexts or to those who do not wish to be limited to a particular strategy for gaining status.

Existing scales relating to the assessment of social status, however, usually restrict the meaning of status according to a specific strategy or type of status. Cheng, Weidman, and Tracy (2014) review a selection of widely-used and well-validated scales relating to status. Several of the self-report scales they review are measures of either *self-perceived* power, dominance, or prestige. Only two of the scales reviewed measure the *desire* for some form of status, and both of these relate specifically to dominance and leadership (Cassidy & Lynn, 1989; Steers & Braunstein, 1976). This leaves a gap for researchers who require a measure that is not specific to dominance or leadership, and instead focuses upon the general desire for status.

One exception of a scale relating to the assessment of social status that is not limited to any specific strategy for gaining status is Gilbert et al.'s (2007) Striving to Avoid Inferiority Scale. The scale has two factors – insecure striving and secure non-striving. Insecure striving measures the belief that one has to strive for high status in order to avoid being seen as inferior, and secure non-striving measures a sense of security in not needing to strive to be accepted by others. Although this scale probably relates quite strongly to the desire for status, neither factor is a direct measure of the desire for high status itself since the desire to avoid inferiority may be driven by different motives than a desire to gain superiority. For example, those who strive to avoid inferiority may be concerned with simply "keeping up" with others so that they are not seen as low-ranking individuals. Consequently, since such a motive concerns avoiding low status, it is quite likely to be driven by different concerns to the desire to achieve status and to be viewed as superior to others.

The Present Study

Given that there is no existing scale that measures the desire for status that is not limited to any particular strategy for gaining status, the following research attempted to

address this gap in the literature by creating a 'Desire for Status Scale'. The scale was developed to complement Gilbert et al.'s Striving to Avoid Inferiority Scale (2007) in that, rather than measuring the desire to avoid being seen as inferior, the scale measures the desire to be seen as superior. Such a scale would be useful in any study that is not focused only on power, dominance, prestige, socioeconomic status, or any specific definition of status.

Earlier, the distinction was drawn between the desire for status and self-perceived status, and as discussed, many of the status-relevant scales reviewed by Cheng et al. (2014) either measure self-perceived power, dominance, or prestige. While the primary goal of this research was to develop a measure of the desire for status, previous research highlights the demand for, and the utility of, a measure of how high one perceives their status to be. Therefore the current study will also develop a measure of perceived superiority, which will measure the degree to which individuals see themselves as possessing high status. The inclusion of this additional factor will enhance the predictive power of the scale, since as discussed earlier, the behaviour that the desire for status predicts could potentially depend on scores on perceived superiority. This could be because the desire for status might mean different things to those who believe they do or do not have high status. For example, if a study aimed to measure how the desire for status relates to a particular status-relevant behaviour, in some instances it might be possible that the desire for status would be a better predictor for those who are low on perceived superiority. Including this additional factor will thus allow for a more nuanced picture than simply measuring the desire for status alone. It was also expected that the desire for status and perceived superiority would correlate with one another, since those who tend to view themselves as superior are likely to think that having high status is important.

The first study focused on item selection for the Desire for Status Scale through the use of confirmatory factor analysis. The scale derived in this study was then administered to a new sample in Study 2, along with a number of existing measures related to social status in

order to assess the convergent validity of the scale. To assess discriminant validity, gender differences, as predicted by evolutionary theory, were also examined.

Study 1: Item Development for the Desire for Status Scale

This study developed and selected items for the Desire for Status Scale. Items were written for both the *desire for status* and *perceived superiority* factors, and scale refinement was conducted through a confirmatory factor analysis.

Method

Participants

Participants were recruited through Amazon's MTurk website and were paid US$0.20 for completing the questionnaire. The study advertisement invited MTurk users to participate in a "survey for a psychology research project" that would take about five minutes to complete. There were 801 responses to the survey, but after deleting incomplete responses there remained 749 participants (471 females and 278 males), of whom 95.1% were US citizens. The mean age of the sample was 35.1 years ($SD = 13.1$), with an age range of 18 to 79 years. Information on participant ethnicity was not collected in this sample.

Materials and Procedure

The questionnaire consisted of 24 items (see Appendix C for the full list of items), written by the researchers to measure the desire for status and perceived superiority, for potential use in the Desire for Status Scale. There were 12 items relating to each construct, half of which were reversed-scored items. Item generation was informed by the previously developed "Status Consciousness Scale" (Alba, McIlwain, Wheeler, & Jones, 2014). The Status Consciousness Scale contains a *rejection of status* factor, which is essentially the opposite of the desire for status, as well as a *high-perceived status* factor that is akin to perceived superiority. Since a number of items from the initial pool of items used to develop

the Status Consciousness Scale tapped into the constructs of interest for the current scale, ten of the items from that initial pool were used as potential items. The remaining items for the current scale were written by the researchers and were designed to assess the *desire for status* and *perceived superiority* constructs.

The questionnaire was administered online through MTurk using Qualtrics software. After reading the information statement and consent form, participants were administered the 24 items in randomised order for each participant. Participants were asked to respond to each item on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Questions regarding demographic information were asked at the end of the survey.

Results and Discussion

Given the large sample size, it was decided that half of the sample would be used as a development sample to select items for the scale and the remaining half as a confirmatory sample in which to test the refined model. Splitting the sample randomly using SPSS resulted in 364 participants in the development sample and 385 participants in the confirmatory sample.

Since items were partly derived from a previous study, confirmatory factor analysis was applied to the development subsample in order to confirm the structure of the two-factor oblique scale. All items loaded significantly on their latent factor, however some loadings were weak and the model fit was poor. Therefore, the scale was refined by removing all items with a standardised loading below .6, since this is considered to be a "good" factor loading (Harrington, 2008). We fitted the model three times, until all items loading below .6 were removed, leaving eight items in the final scale (see Table 1 for the list of items). Given that two of the items on the *desire for status* factor were reverse-scored, an error covariance pathway was added for these two items (Harrington, 2008). This resulting eight-item model had an acceptable fit; χ^2 (18) = 54.809, χ^2/df = 3.045, p = .000, TLI = .958, CFI = .973, RMSEA = .075.

Table 1

Items on the Desire for Status Scale

Desire for status:

---

1. I would love to be at the top of the social ladder.

2. It's important to me to have a high place in the world.

3. I find the idea of being a high-status person very appealing.

4. It doesn't matter to me where I stand in the social order.

5. Having high social status doesn't really matter to me.

Perceived superiority:

---

1. When someone else does well, I can always think of a way in which I'm better than them.

2. I can always find some way in which I'm better than any other person I know.

3. When I'm with a group of people I usually feel like I'm one of the better ones in the group.

To show that the two-factor model accounted for the items better than a single-factor model, the fit for a single-factor model was calculated. The model fit was poor; $\chi^2 (19) = 292.352$, $\chi^2/df = 15.387$, $p = .000$, TLI = .705, CFI = .800, RMSEA = .199. The two-factor orthogonal model fit was also poor; $\chi^2 (19) = 137.035$, $\chi^2/df = 7.212$, $p = .000$, TLI = .873, CFI = .914, RMSEA = .131. However, when compared to the two-factor oblique model, the

chi-square difference tests for both the single-factor model, $\chi^2(1) = 237.543$, $p < .05$, and the two-factor orthogonal model, $\chi^2(1) = 82.226$, $p < .05$, were significant, confirming that the two-factor oblique model had a better fit.
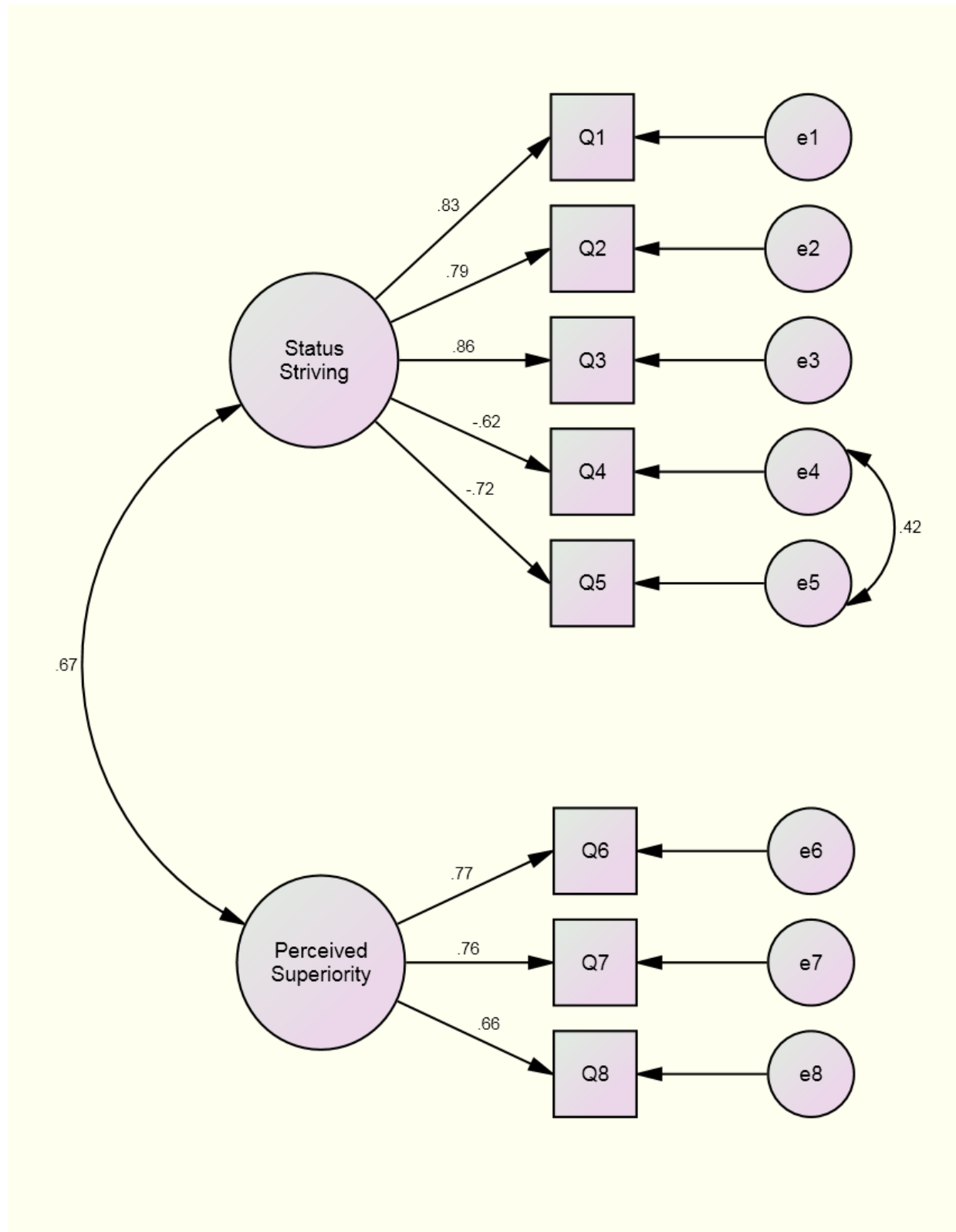
Figure 1. Model from CFA in Study 1 for 8-item solution in confirmatory dataset ($n = 385$).

This 8-item, two-factor oblique model was then tested in the confirmatory sample, and the model fit was good, χ^2 (18) = 31.493, χ^2/df = 1.750, p = .025, TLI = .986, CFI = .991, RMSEA = .044. This model is presented in Figure 1. The finding that the model derived in the development sample was replicated in an independent sample suggests that the scale structure is sound.

Using the entire dataset, the raw correlation between the two subscale factors was r = .50, $p < .001$. As expected, this finding suggests that individuals who desire high status are also more likely to believe that they have high status, yet the model confirms that these factors are two distinct dimensions.

Since the structure of the eight-item Desire for Status Scale derived through confirmatory factor analysis was sound, it was then subjected to preliminary validation in a new sample.

Study 2: Examination of Construct Validity of the Status Consciousness Scale

The purpose of Study 2 was to administer the Desire for Status Scale alongside a number of personality variables that were expected to correlate with one or both of the factors of the scale in order to examine its convergent validity. These scales were selected on the basis that they assessed personality parameters that were either directly or indirectly relevant to status concerns. This sample was also used to examine the test-retest reliability of the scale, and discriminant validity was examined by comparing gender differences on the scale. The scale was also used to test a prediction from life history theory about age and the desire for status.

Firstly, it was predicted that *desire for status* would correlate positively with the *insecure striving* factor on the Striving to Avoid Inferiority Scale (SAIS) (Gilbert et al., 2007), since this subscale measures the belief that one has to strive to achieve in order to avoid being seen as inferior. Furthermore it was predicted that *desire for status* would

correlate negatively with the *secure non-striving* factor on the SAIS since this subscale measures a sense of security in one's social position, and not feeling the need to compete for status.

The Desire for Status Scale was also expected to relate to interpersonal dominance, since this is one means by which status is achieved. The Assertiveness scale from the International Personality Item Pool (IPIP) (Goldberg et al., 2006) was included because it correlates with the dominance scale on the California Personality Inventory (Gough & Bradley, 1996). Assertiveness was predicted to correlate positively with both *desire for status* and *perceived superiority*, since those who are inclined to behave in a dominating fashion are likely to both prefer high status and view themselves as superior to others.

Additionally, the correlations with Cheng et al.'s (2010) Dominance and Prestige Scale, which measures self-perceived dominance and prestige, was also assessed. It was predicted that *desire for status* would correlate positively with the Dominance subscale, since several of these items entail a desire for- and enjoyment of- dominance. It was predicted that *perceived superiority* would correlate positively with the Prestige subscale, since these items appear to measure the perception that others believe one to have high-status.

The Social Dominance Orientation (SDO) scale (Pratto, Sidanius, Stallworth, & Malle, 1994) measures favourable attitudes towards hierarchies, and was thus predicted to correlate positively with *desire for status*. The SDO scale refers to hierarchies involving groups rather than individuals within hierarchies, but nonetheless it was anticipated that individuals who have a preference for hierarchies among groups would be higher on *desire for status* than those who have a preference for equality. It was predicted that SDO would also correlate positively with *perceived superiority*, since these favourable attitudes towards hierarchies were expected to be more common among those who view themselves as being superior to others.

It was further predicted that *desire for status* would correlate positively with the Revised Competitiveness Index (Houston, Harris, McIntire, & Francis, 2002), since people who are competitive are likely to want to be the best in many regards, including social status. Presumably, competitiveness may at least in part be driven by the desire to be superior to others.

It is also likely that the concern with status is substantially related to the concern with making social comparisons, since comparing oneself with others may occur for the purpose of finding out where one is ranked in comparison. Gibbons and Buunk (1999) developed the Iowa-Netherlands Comparison Orientation Measure (INCOM), which measures individual differences in the tendency to make social comparisons, and it was predicted that *desire for status* would correlate positively with this measure.

Additionally, it was predicted that both *desire for status* and *perceived superiority* would correlate positively with the Narcissistic Personality Inventory (NPI) (Raskin & Terry, 1988). The NPI has several components that may correlate with one or both of these factors, in particular: *authority, exhibitionism, superiority, vanity*, and *entitlement*. Individuals who desire high status or believe themselves to be superior are likely to be high on these elements.

Also included was a measure of hypersensitive narcissism, which differs from the NPI in that it is a measure of covert narcissism, and does not correlate with the NPI (Hendin & Cheek, 1997). Much like those high on overt narcissism, covert narcissists are preoccupied with achieving glory and receiving recognition from others. However, these individuals keep their sense of grandiosity well-hidden from others and often outwardly reject status concerns (Akhtar, 2000). Therefore it was predicted that hypersensitive narcissism would correlate positively with both *desire for status* and *perceived superiority*, but that these correlations would not be as strong as those with the NPI.

Lastly, it was expected that self-esteem (Rosenberg, 1965) would correlate positively with *perceived superiority*, since those who view themselves as superior to others are likely to

have higher self-esteem. This is in line with Barkow's (1980) argument that self-esteem is a gauge of our relative social standing, and that our drive for self-esteem evolved from the primate drive for social dominance.

This set of predictions about correlations with related scales all contribute to establishing the convergent validity of the Desire for Status Scale. In addition to this, we tested two further predictions based on evolutionary theory, which further contributes to establishing the validity of the scale. In line with evolutionary theory (Buss, 2008; Fletcher, Tither, O'Laughlin, Friesen, & Overall, 2004; Li, Bailey, Kenrick, & Linsenmeier, 2002; Li & Kenrick, 2006, Li, et al., 2013), we predicted that men would score higher than women on *desire for status*. If men are higher on the desire for status then they should also be more likely to gain higher status and perceive themselves to have higher status than women. Therefore we predicted that men would also score more highly on *perceived superiority* than women. Since these gender differences are predicted by theory, finding that our scale discriminates such differences would contribute to the establishment its discriminant validity. We also predicted, using life history theory (Chisholm et al., 1993; Kaplan & Gangestad, 2005), that there would be a negative correlation between *desire for status* and age, since the desire for status should be strongest during early adulthood when the priority to attract mates is the highest.

Method

Participants

Once again, participants were recruited through Amazon's MTurk website and were paid US$1 for their participation. Again they were invited to participate in a "survey for a psychology research project" that would take about 30 minutes to complete. There were 303 participants (141 females and 162 males). The mean age of the sample was 31.55 years ($SD =$ 11.00), with a range of 18 to 70 years, and 98.3% of the participants were US citizens. The

participants were 70.6% White, 13.5% Asian, 5.6% Black, 4.0%, Hispanic, 4.0% mixed

ethnicity, and 2.3% were 'other' or not specified.

Materials and Procedure

After reading the information statement and consent form, participants were

administered the Desire for Status Scale. Participants then completed the following scales in

randomised order for each participant:

Striving to Avoid Inferiority. The Striving to Avoid Inferiority Scale (Gilbert et al.,

2007) has a 19-item *insecure striving* factor (e.g. "If I don't strive to achieve, I'll be seen as

inferior to other people") and a 12-item *secure non-striving* factor (e.g. "Whether I succeed or

fail, people value me as a person"). Participants respond on a scale ranging from 1 (*never*) to

5 (*always*).

Dominance and Prestige Scale. This questionnaire (Cheng et al., 2010) has eight

items measuring dominance (e.g. "I enjoy having control over others") and nine items

measuring prestige (e.g. "Members of my group respect and admire me"). Participants

respond on a scale ranging from 1 (*not at all*) to 7 (*very much*).

Interpersonal Dominance. The Assertiveness scale from the IPIP (Goldberg et al.,

2006) was used to measure interpersonal dominance.   The scale has 10 items and participants

are asked how well each statement (e.g. "Try to lead others") describes them on a scale

ranging from 1 (*very inaccurate*) to 5 (*very accurate*).

Social Dominance Orientation. The SDO scale (Pratto et al., 1994) has 16 items.

Participants respond to items (e.g. "Inferior groups should stay in their place") on a scale

ranging from 1 (*very negative*) to 7 (*very positive*).

Competitiveness. The 14-item Revised Competitiveness Index (Houston et al., 2002)

was used to measure competitiveness. Participants rate how much they agree or disagree with

each statement (e.g. "I like competition") on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Social Comparison Orientation. Social Comparison Orientation was measured using the Iowa-Netherlands Comparison Orientation Measure (INCOM) (Gibbons & Buunk, 1999). The scale has 11 items. Participants indicate how much they agree or disagree with each statement (e.g. "If I want to find out how well I have done something, I compare what I have done with how others have done") on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Overt narcissism. Overt narcissism was measured using the NPI (Raskin & Terry, 1988). The scale has 40 items where participants are asked to choose which of two options best describe them (e.g. A. "The thought of ruling the world frightens the hell out of me" or B. "If I ruled the world it would be a better place"), where the more narcissistic option is scored one point.

Covert narcissism. The Hypersensitive Narcissism scale (Hendin & Cheek, 1997) is a 10-item true or false questionnaire (e.g. "When I enter a room I often feel self-conscious and feel that the eyes of others are upon me") that measures covert narcissism, where every "true" response is scored one point.

Self-esteem. The Rosenberg Self-Esteem scale (Rosenberg, 1965) is a 10-item scale. Participants rate how much they agree or disagree with each statement (e.g. "On the whole, I am satisfied with myself") on a scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*).

Once again, the questionnaire was administered online through MTurk using Qualtrics software. The order of items within scales was randomised by Qualtrics for each participant. Scores on all these scales were calculated by averaging the total score by the number of items on the scale, except the NPI and the Hypersensitive Narcissism scale, where total scores are calculated. After the presentation of the scales, participants were asked for their demographic information. In order to be able to examine the temporal stability of the scale (test-retest

reliability), participants were invited to participate in a second survey at a later date. If they chose to, participants could provide their email address at the end of the questionnaire. Three weeks later they were emailed the link for the second part of the study, which contained the Desire for Status Scale and some demographic questions.

Results and Discussion

The descriptive statistics for all personality scales are shown in Table 2. Cronbach's alphas indicate that both factors on the Desire for Status Scale had good internal consistency. The correlations between the two factors forming the Desire for Status Scale and the other personality measures were calculated, and are presented in Table 3.

The findings indicate that the scale demonstrated good convergent validity in that *desire for status* correlated positively with insecure striving, and this correlation was strong. *Desire for status* also had moderate positive correlations with the NPI, the INCOM, dominance, competitiveness, and SDO, indicating convergent validity. However the predicted positive correlations with assertiveness and hypersensitive narcissism were only weak, as was the predicted negative correlation with secure non-striving.

Table 2

Descriptive statistics for the variables in Study 2

	M	*SD*	Minimum	Maximum	Cronbach's alpha
Desire for status	3.98	1.36	1.00	7.00	.91
Perceived superiority	3.77	1.41	1.00	7.00	.87
Insecure striving	2.84	0.77	1.00	4.84	.94
Secure non-striving	3.41	0.82	1.17	5.00	.95
Dominance	3.20	1.21	1.00	6.50	.88
Prestige	4.82	0.95	1.67	7.00	.86
Assertiveness	3.15	0.75	1.00	5.00	.87
SDO	2.56	1.02	1.25	5.75	.92
Competitiveness	3.01	0.79	1.00	4.86	.92
INCOM	3.40	0.68	1.18	5.00	.87
NPI	12.76	8.51	.00	40.00	.91
Hypersensitive narcissism	4.97	2.35	.00	10.00	.65
Self-esteem	2.98	0.59	1.00	4.00	.92

Table 3

Correlations between factors on the Desire for Status Scale and variables in Study 2

	Desire for status	Perceived superiority	Insecure striving	Secure non-striving	Dominance	Prestige	Assertiveness	SDO	Competitiveness	INCOM	NPI	Hypersensitive narcissism	Self-esteem
Desire for status	-												
Perceived superiority	.35**	-											
Insecure striving	.49**	.40**	-										
Secure non-striving	-.22**	-.07	-.33**	-									
Dominance	.44**	.51**	.36**	-.16**	-								
Prestige	.11	.23**	-.02	.43**	.19**	-							
Assertiveness	.23**	.25**	.06	.20**	.47**	.49**	-						
SDO	.28**	.37**	.23**	-.16**	.46**	.07	.09	-					
Competitiveness	.35**	.34**	.23**	.01	.53**	.26**	.53**	.18**	-				
INCOM	.43**	.24**	.59**	-.27**	.19**	.17**	.06	.07	.24**	-			
NPI	.45**	.51**	.26**	-.05	.66**	.36**	.61**	.34**	.52**	.14*	-		
Hypersensitive narcissism	.15**	.20**	.42**	-.30**	.14*	-.20**	-.31**	.16**	-.10	.24**	.00	-	
Self-esteem	.01	.12*	-.22**	.46**	.13**	.63**	.45**	-.07	.25**	-.05	.28**	-.31**	-

*$p < .05$
**$p < .01$

Consistent with predictions, *perceived superiority* correlated positively with the NPI, and this correlation was strong. *Perceived superiority* also had a moderate positive correlation with SDO, which was as predicted, further supporting the convergent validity of the scale. However, *perceived superiority* was found to have a strong positive correlation with dominance, and moderate positive correlations with insecure striving, and competitiveness, which were not predicted. This suggests that people who feel that they are superior to others are more likely to be interpersonally dominant, competitive, and believe that they need to compete in order to avoid inferiority. Additionally, the predicted positive correlations of *perceived superiority* with prestige, hypersensitive narcissism and assertiveness were weak, and the correlation with self-esteem was very weak. Nevertheless, despite the weakness of these particular correlations, these findings still suggest a relationship of the predicted direction. *Perceived superiority* also had a weak positive correlation with the INCOM that was not predicted, which suggests that social comparison tendencies are slightly more common among those who perceive themselves to be superior to others.

The correlations between hypersensitive narcissism and both factors of the Desire for Status Scale were weaker than those with the NPI, suggesting that the NPI relates more strongly to overt and avowable status concerns. These findings were consistent with expectations, and also contribute to the convergent validity of the scale. We also examined the correlations with the subscales of the NPI. *Desire for status* correlated most strongly with the authoritarianism ($r = .41$, $p < .01$) and entitlement ($r = .41$, $p < .01$) subscales, with all the remaining correlations below .4. The *perceived superiority* subscale correlated most strongly with the superiority ($r = .43$, $p < .01$) and entitlement ($r = .49$, $p < .01$) subscales, with all the remaining correlations below .4.

Overall, the factors of the scale and the other personality variables converged in meaningful ways indicating that the new scale is a valid measure of the desire for status and perceived superiority. Although there were some significant correlations that were not

predicted, none of these correlations indicated any inconsistencies in interpretation of the Desire for Status Scale and instead indicated that the factors are measuring their intended constructs.   Interestingly, both subscales correlated more strongly with dominance than prestige on Cheng et al.'s (2010) Dominance and Prestige Scale. This suggests that the Desire for Status Scale is tapping into the desire for- and enjoyment of- dominance more than self-perceived prestige.

It is also worth noting that the correlation between the *desire for status* factor and the *perceived superiority* factor was $r = .35$ in this study, while it was $r = .50$ in Study 1. We tested whether these two correlation coefficients were different using Fisher's r-to-z transformation, and found that the correlation in Study 1 was significantly larger than the correlation in Study 2, $z = 2.69$, $p = .007$. This significant difference might be due to the fact that Study 1 had a substantially larger sample size, and possibly due to the fact that participants in Study 2 only completed the final 8-item scale, rather than the larger pool of potential scale items administered in Study 1.

Test-retest reliability of the Desire for Status Scale was also assessed. There were 155 participants who completed the survey at time two, after deleting one participant who completed the survey twice. There was a strong positive correlation between time one and time two for both the *desire for status* factor, $r = .81$, $p < .001$, and the *perceived superiority* factor, $r = .71$, $p < .001$. Repeated-measures *t*-tests revealed no significant difference between time one and time two for both the *desire for status* factor, $t(154) = -0.18$, $p = .86$, and the *perceived superiority* factor, $t(154) = 0.70$, $p = .84$. This suggests that the test-retest reliability of the scale is good.

Since evolutionary theory predicts gender differences relating to status (Buss, 2008; Fletcher, et al., 2004; Li, Bailey, Kenrick, & Linsenmeier, 2002; Li & Kenrick, 2006; Li, et al., 2013), these were examined with independent-samples *t*-tests in both samples. These results, presented in Table 4, show that men were higher than women on both subscales in

both studies, indicating discriminant validity. This confirms the prediction from evolutionary theory that men should be higher than women on *desire for status* and is in line with previous findings. The result that men were also higher than women on *perceived superiority* is also in line with evolutionary theory, since a greater desire for status should result in men being more likely to have high status and perceiving themselves to have higher status than women. These gender differences show that both factors of the scale discriminate between groups in a theoretically meaningful way.

Table 4

Gender differences on the Desire for Status Scale in Studies 1 and 2

Study	Females	Males	df	t	p	d
	M (SD)	M (SD)				
Desire for status						
Study 1	3.32 (1.34)	3.79 (1.33)	747	-4.66	<.001	0.35
Study 2	3.79 (1.27)	4.14 (1.42)	301	-2.24	.026	0.26
Perceived superiority						
Study 1	3.16 (1.28)	3.76 (1.25)	747	-6.30	<.001	0.47
Study 2	3.48 (1.42)	4.02 (1.35)	301	-3.39	.001	0.39

Note. For Study 1 the whole sample is used and for Study 2 only the data from time one is used.

Using life history theory (Chisholm, et al., 1993; Kaplan & Gangestad, 2005), we predicted that age would correlate negatively with *desire for status*, since this desire should be strongest when the priority to mate is the strongest during early adulthood. In line with predictions, there was a moderate negative correlation between *desire for status* and age using the whole sample in Study 1, $r = -.30$, $p < .001$, and a weak negative correlation Study 2, $r = -.23$, $p < .001$.

General Discussion

The results of these studies suggest that the Desire for Status Scale has good convergent validity, with Study 2 finding that the subscales correlated in meaningful ways with existing personality variables. This indicates that the scale validly and reliably assesses the desire for status and perceived superiority in this sample. Consequently, this scale could be employed in studies requiring a short, validated measure of these constructs. Furthermore, one of the strengths of this Desire for Status Scale is that it does not restrict status to any particular type. This makes the scale useful in studies that might contain different contexts for gaining status, such as power, dominance, and prestige, where a measure of the desire for status is needed that can be used and compared across those different contexts.

The Desire for Status Scale also demonstrated discriminant validity between males and females. Nevertheless, additional research could further examine the discriminant validity of the scale, perhaps by comparing scores on the scale between individuals in different professions. It is predicted that those who score highly on *desire for status* are likely to be in professions that involve opportunities for advancement in hierarchies, and that those who score highly on *perceived superiority* are in professions that are considered to be high-status in society.

Further research that addresses status-seeking strategies and the motives that drive them could also examine the properties of the scale in more detail. As discussed in the

introduction, it is also possible that there are noteworthy differences in people who score high on one factor of the scale, and either high or low on the other factor. Again, these differences could relate to particular occupations, to people at different phases of their career, to the manner in which people ascend the status hierarchy in the workplace, and to other status-related outcomes.

The finding that *desire for status* correlated negatively with age also supports the validity of the scale, given that this prediction was made on the basis of life history theory (Chisholm et al., 1993; Kaplan & Gangestad, 2005). Further validation of the scale should examine more of the predictive validity of the scale, perhaps by showing that *desire for status* predicts status-seeking behaviour in specific situations involving opportunities to gain status. The *perceived superiority* subscale should correlate with a perception of having higher status in these situations, and should also predict a greater objection to having one's status challenged or to experiencing a loss of status. Given that previous research has found a connection between concern with status and well-being (Cheung et al., 2004; Gilbert, 2000; Gilbert et al., 2007; Zuroff et al., 2007) future research could also examine how the Desire for Status Scale correlates with depression, anxiety, and other well-being measures. Future research could also examine the relationship between the Desire for Status Scale and other variables, such as subjective socio-economic status (Adler, Epel, Castellazzo, & Ickovics, 2000), political attitudes, and values. The properties of the scale could also be examined in non-Western cultures, particularly since this study was limited to the US. We also expect that the desire for status can change for individuals across time, since as we argued above, the desire for status should be dependent upon an individual's circumstances. If an individual's circumstances were to change such that new opportunities for status-advancement were to arise, we would expect their desire to status to increase. Future research could potentially examine the nature of changes in the desire for status in longitudinal studies.

One of the limitations of this study is that some potentially valuable demographic information was not collected, such as socio-economic status, political orientation, and in Study 1, ethnicity. There might be significant differences on both *desire for status* and *perceived superiority* according to all of these characteristics that are worth investigating.

Another limitation of this study relates to the problem of social desirability, which we did not address. A recent study found that people are reluctant to admit to status striving, and that striving for status is viewed negatively (Kim & Pettit, 2015). Therefore it might be the case that participants may not have answered our questions entirely honestly, and future research could attempt to account for social desirability effects. Nevertheless, our results revealed a good range of scores on the scale, indicating that participants were willing to respond to the items on both ends of the response scale.

In conclusion, this new Desire for Status Scale offers a short, efficient, and freely available scale of the desire for status that would be useful in social and evolutionary psychology studies of social status. Unlike previous scales, it offers a direct measure of the desire for status that is not limited to any particular type of status or strategy for gaining status. This scale provides a valuable tool for researchers who want a short, simple measure of the general desire for status. Moreover, this scale measures a construct based in evolutionary theory that pervades all areas of human social life and is ubiquitous across cultures.

References

Adler, N. E., Epel, E., Castellazzo, G., & Ickovics, J. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy white women. *Health Psychology, 19*, 586-592.

Akhtar, S. (2000). The shy narcissist. In J. Sandler, R. Michels & P. Fonagy (Eds.), *Changing ideas in a changing world: The revolution in psychoanalysis - Essays in honour of Arnold Cooper* (pp. 111-119). New York: Karnac.

Alba, B., McIlwain, D., Wheeler, L., & Jones, M. P. (2014). Status consciousness: A preliminary construction of a scale measuring individual differences in status-relevant attitudes, beliefs, and desires. *Journal of Individual Differences, 35*, 166-176.

Anderson, C., Ames, D. R., & Gosling, S. D. (2008). Punishing hubris: The perils of overestimating one's status in a group. *Personality and Social Psychology Bulletin, 34*, 90-101.

Anderson, C., Hildreth, J. A. D., & Howland, L. (2015). Is the desire for status a fundamental human motive? A review of the empirical literature. *Psychological Bulletin, 141*, 574-601.

Anderson, C., Willer, R., Kilduff, G. J., & Brown, C. E. (2012). The origins of deference: When do people prefer lower status? *Journal of Personality and Social Psychology, 102*, 1077-1088.

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: Garland STPM Press.

Berg, V., Lummaa, V., Lahdenpera, M., Rotkirch, A., & Jokela, M. (2014). Personality and long-term reproductive success measured by the number of grandchildren. *Evolution and Human Behavior, 35*, 533-539.

Boehm, C. (1999). *Hierarchy in the forest: The evolution of egalitarian behavior*. Cambridge: Harvard University Press.

Buss, D. M. (2008). *Evolutionary psychology: The new science of the mind* (3rd ed.). Boston: Pearson/Allyn and Bacon Publishers.

Campbell, A. (2005). Aggression. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 628-652). Hoboken: John Wiley & Sons.

Cassidy, T., & Lynn, R. (1989). A multifactorial approach to achievement motivation: The development of a comprehensive measure. *Journal of Occupational Psychology, 62*, 301-312.

Cheng, J. T., Tracy, J. L., Foulsham, T., Kingstone, A., & Henrich, J. (2013). Two ways to the top: Evidence that dominance and prestige are distinct yet viable avenues to social rank and influence. *Journal of Personality and Social Psychology, 104*, 103-125.

Cheng, J. T., Tracy, J. L., & Henrich, J. (2010). Pride, personality, and the evolutionary foundations of human social status. *Evolution and Human Behavior, 31*, 334-347.

Cheng, J. T., Weidman, A. C., & Tracy, J. L. (2014). The assessment of social status: A review of measures and experimental manipulations. In J. T. Cheng, J. L. Tracy & C. Anderson (Eds.), *The psychology of social status* (pp. 347-362). New York: Springer.

Cheung, M. S. P., Gilbert, P., & Irons, C. (2004). An exploration of shame, social rank and rumination in relation to depression. *Personality and Individual Differences, 36*, 1143-1153.

Chisholm, J. S., Ellison, P. T., Evans, J., Lee, P., Lieberman, L. S., Pavlik, Z., . . . Worthman, C. M. (1993). Death, hope, and sex: Life-history theory and the development of reproductive strategies. *Current Anthropology, 34*, 1-24.

Cote, S. D., & Festa-Bianchet, M. (2001). Reproductive success in female mountain goats: The influence of age and social rank. *Animal Behaviour, 62*, 173-181.

Cummins, D. D. (2006). Dominance, status, and social hierarchies. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 676-697). Hoboken, NJ: Wiley.

De Botton, A. (2005). *Status anxiety*. New York: Vintage.

De Waal, F. (2007). *Chimpanzee politics: Power and sex among apes*. New York: JHU Press.

Eibl-Eibesfeldt, I. (2007). *Human ethology*. New York: Transaction Publishers.

Ellis, L. (1995). Dominance and reproductive success among nonhuman animals: A cross-species comparison. *Ethology and Sociobiology, 16*, 257-333.

Fletcher, G. J., Tither, J. M., O'Loughlin, C., Friesen, M., & Overall, N. (2004). Warm and homely or cold and beautiful? Sex differences in trading off traits in mate selection. *Personality and Social Psychology Bulletin, 30*, 659-672.

Fournier, M., Moskowitz, D., & Zuroff, D. (2002). Social rank strategies in hierarchical relationships. *Journal of Personality and Social Psychology, 83*, 425-433.

Gibbons, F. X., & Buunk, B. P. (1999). Individual differences in social comparison: Development of a scale of social comparison orientation. *Journal of Personality and Social Psychology, 76*, 129-142.

Gilbert, P. (1992). *Depression: The evolution of powerlessness*. New York: The Guilford Press.

Gilbert, P. (2000). The relationship of shame, social anxiety and depression: The role of the evaluation of social rank. *Clinical Psychology and Psychotherapy, 7*, 174-189.

Gilbert, P., Broomhead, C., Irons, C., McEwan, K., Bellew, R., Mills, A., . . . Knibb, R. (2007). Development of a striving to avoid inferiority scale. *British Journal of Social Psychology, 46*, 633-648.

Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. G. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality, 40*, 84-96.

Gough, H., & Bradley, P. (1996). *CPI manual*. Palo Alto: Consulting Psychologists Press.

Gurven, M., von Rueden, C., Stieglitz, J., Kaplan, H., & Rodriguez, D. E. (2014). The

    evolutionary fitness of personality traits in a small-scale subsistence society. *Evolution*

    and Human Behavior, 35, 17-25.

Harrington, D. (2008). *Confirmatory factor analysis*. New York: Oxford University Press.

Hendin, H. M., & Cheek, J. M. (1997). Assessing hypersensitive narcissism: A reexamination

    of Murray's Narcism Scale. *Journal of Research in Personality, 31*, 588-599.

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.

Hopcroft, R. L. (2006). Sex, status, and reproductive success in the contemporary United

    States. *Evolution and Human Behavior, 27*, 104-120.

Houston, J., Harris, P., McIntire, S., & Francis, D. (2002). Revising the Competitiveness

    Index using factor analysis. *Psychological Reports, 90*, 31-34.

Kaplan, H. S., & Gangestad, S. W. (2005). Life history theory and evolutionary psychology.

    In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 68-95). New

    York: Wiley.

Kim, H. Y., & Pettit, N. C. (2015). Status is a four-letter word: Self versus other differences

    and concealment of status-striving. *Social Psychological and Personality Science, 6*,

    267-275.

Li, N. P., Bailey, J. M., Kenrick, D. T., & Linsenmeier, J. A. (2002). The necessities and

    luxuries of mate preferences: Testing the tradeoffs. *Journal of Personality and Social*

    Psychology, 82, 947-955.

Li, N. P., & Kenrick, D. T. (2006). Sex similarities and differences in preferences for short-

    term mates: What, whether, and why. *Journal of Personality and Social Psychology,*

    90, 468-489.

Li, N. P., Yong, J. C., Tov, W., Sng, O., Fletcher, G. J., Valentine, K. A., . . . Balliet, D.

(2013). Mate preferences do predict attraction and choices in the early stages of mate

selection. *Journal of Personality and Social Psychology, 105*, 757-776.

Liddle, J. R., Shackelford, T. K., & Weekes-Shackelford, V. A. (2012). Why can't we all just

get along? Evolutionary perspectives on violence, homicide, and war. *Review of*

General Psychology, 16, 24-36.

Mazur, A. (1985). A biosocial model of status in face-to-face primate groups. *Social Forces,*

64, 377-402.

Nettle, D. (2006). The evolution of personality variation in humans and other animals.

American Psychologist, 61, 622-631.

Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social Dominance

Orientation: A personality variable predicting social and political attitudes. *Journal of*

Personality and Social Psychology, 67, 741-763.

Price, J. S., & Sloman, L. (1987). Depression as yielding behavior: An animal model based on

Schjelderup-Ebbe's pecking order. *Ethology and Sociobiology, 8*, 85-98.

Price, J. S., Sloman, L., Gardner, R., Gilbert, P., & Rohde, P. (1994). The social competition

hypothesis of depression. *British Journal of Psychiatry, 164*, 309-315.

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.

Ridgeway, C. L., & Diekema, D. (1989). Dominance and collective hierarchy formation in

male and female task groups. *American Sociological Review, 54*, 79-93.

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

University Press.

Russon, A., & Waite, B. (1991). Patterns of dominance and imitation in an infant peer group.

Ethology and Sociobiology, 12, 55-73.

Sloman, L., & Price, J. S. (1987). Losing behavior (yielding subroutine) and human depression: Proximate and selective mechanisms. *Ethology and Sociobiology, 8*, 99-109.

Steers, R. M., & Braunstein, D. N. (1976). A behaviorally-based measure of manifest needs in work settings. *Journal of Vocational Behavior, 9*, 251-266.

Strayer, F. F., & Trudel, M. (1984). Developmental changes in the nature and function of social dominance among young children. *Ethology and Sociobiology, 5*, 279-295.

von Rueden, C. (2014). The roots and fruits of social status in small-scale human societies. In J. T. Cheng, J. L. Tracy & C. Anderson (Eds.), *The psychology of social status* (pp. 179-200). New York: Springer.

Wilson, M., & Daly, M. (1985). Competitiveness, risk taking, and violence: The young male syndrome. *Ethology and Sociobiology, 6*, 59-73.

Zuroff, D. C., Fournier, M. A., & Moskowitz, D. (2007). Depression, perceived inferiority, and interpersonal behavior: Evidence for the involuntary defeat strategy. *Journal of Social and Clinical Psychology, 26*, 751-778.

Zuroff, D. C., Fournier, M. A., Patall, E. A., & Leybman, M. J. (2010). Steps toward an evolutionary personality psychology: Individual differences in the social rank domain. *Canadian Psychology, 51*, 58-66.

Introduction to Chapter 4

How do people understand status? A qualitative analysis

The Desire for Status Scale developed in the previous chapter demonstrated good convergent validity by correlating in expected ways with various established variables relevant to status. The scale also demonstrated discriminant validity by showing that men scored higher than women on *desire for status* and *perceived superiority*, as predicted by evolutionary theory. We also found a negative correlation between *desire for status* and age, as predicted using life history theory. The Desire for Status Scale is a short scale that is potentially valuable for studies requiring a scale measuring the desire for status that is not restricted to any particular type of status.

We decided to further investigate issues surrounding the validity of the scale by examining how people understand the concept of status, particularly since the term "status" was used in two of the scale items. The remaining items, and the items in the Status Consciousness Scale, also referred to a general sense of superior rank without specifically referring to any type of status, such as dominance, prestige, or power. We deliberately conceptualised status in this broad way because we argued that on the basis of evolutionary theory there should be a general desire for status in any form that it can be gained, and we wanted to examine individual differences in this general desire for status. However, whether or not participants interpreted the items in our scale with this same broad understanding of status has implications for the validity of the scale. Therefore we investigated how people interpret the word "status". This decision was partly prompted by recent literature that called into question the lack of clarity in the definition of the term "status" in psychological research, and the demonstration that the term is often used interchangeably with concepts such as power, dominance, and prestige. The issue of precisely defining status and defining it in relation to related constructs such as power, dominance, and prestige is a cutting edge topic

that has coincided with the development of this research project. Given our broad use of the term "status" and the discussion about the lack of clarity of the term in the literature, we decided to explore how laypeople understand the word "status" using a qualitative design. We did this with the intention of exploring issues regarding the meaning of the constructs measured in our scales, as well as contributing to the debate on how the term "status" should be defined in psychology.

Chapter 4

How do people understand status?
A qualitative analysis

Abstract

The term "status" has been conceptualised in a variety of ways throughout the social sciences. Some researchers have defined the term broadly, allowing it to take different forms, or defined status as being acquired through different means, such as power, dominance, and prestige. Others have defined status similarly to prestige, meaning having the respect, admiration, and esteem of others. A lack of clarity and consensus on the meaning of the term is problematic for psychologists conducting research on the topic. The following study examined the understanding of the word "status" in the minds of laypeople in order to contribute to the debate on how it is most appropriate to define the term. We asked a sample of participants (n = 86) a set of ten open-ended questions on status. A qualitative analysis of responses revealed that the term "status" had multiple meanings in this sample, including prestige, power/influence, material wealth, social benefits, and more. While these results may be limited to a particular culture, they suggest that the term "status" is broad in meaning. Implications for current research on status are discussed.

Throughout the psychological and sociological literature, the notion of 'social status' has been conceptualised in various ways and status has often overlapped with other concepts such as dominance, prestige, and power (Blader & Chen, 2014; Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013; Henrich & Gil-White, 2001). Blader and Chen (2014) argue that this lack of consensus on the meaning of the word "status" is inhibiting the development of the field not merely because of issues around measurement and methodology, but also because our theorising around status requires us to be able to distinguish the concept clearly. With a multiplicity of conceptualisations of "status" in the social sciences, the question remains as to how the term should be defined.

While some psychologists argue for one particular technical definition of status over another, this does not necessarily reflect how it is defined in laypeople's understanding. If psychologists are to come to a consensus on the technical definition of status, then this should occur with some consideration as to how the term is used in everyday language for several reasons. Firstly, consideration of the common usage of the term is important for psychologists who conduct research on and theorise about status, since the technical definition of the term should be reasonably in line with its common definition. Second, if the term "status" is used directly with participants in psychological research, then participants' understanding of the concept should be in line with researchers' expectations of participants' understanding, otherwise researchers might not be measuring what they think they are measuring. Third, understanding laypeople's perception of status provides insight into the lived experience of status itself. Asking laypeople for their thoughts on status allows us to see what status means to them in their own terms, without pre-empting or prescribing what the term should mean. This is where qualitative research is particularly valuable, because it reveals participants' understanding of concepts in their own words, without the constraints and presumptions often inherent in quantitative research. Therefore the following study will explore laypeople's understanding of status in order to shed light on how they generally

understand it, and argue that this should play some role in the decision on how we should define the term "status" in psychological research.

Before looking at how status has been defined in the literature, we will begin by briefly reviewing the related concepts of power, dominance, and prestige. We will then tackle how the term status has been defined, and illustrate how status has often been defined synonymously with these other terms. Several authors have recently gone about the task of comparing definitions of status, dominance, prestige, and power (Anderson, Hildreth, & Howland, 2015; Blader & Chen, 2014; Cheng et al., 2013), and we will provide a similar brief review below.

Power

The definition of power throughout the literature typically entails having control over outcomes, people, or resources (Anderson, John, & Keltner, 2012; Fiske, 1993; Galinsky, Gruenfeld, & Magee, 2003; Georgesen & Harris, 2000; Magee & Galinsky, 2008; Overbeck & Park, 2001). These resources could be material and physical resources such as money and space, or they could be social, such as the ability to include or exclude others, or to dictate others' behaviour (Fiske, 2010). Some definitions of power also emphasise the ability of powerful individuals to control outcomes such as administering rewards and punishments to others (Fast & Chen, 2009). Keltner, Gruenfeld and Anderson (2003) emphasise that power is the *capacity* to change others' states through providing or withholding resources or administering punishments, rather than just the practice of actually exerting that influence.

Given this general definition of power, specifying the exact nature of power depends on the situation and what specifically powerful individuals have the capacity to control, and this can vary greatly across situation and contexts. However, as Anderson et al. (2012) point out, power is not only the objective capacity for control, but also "a psychological state – a perception of one's capacity to influence others" (p. 314). In order to measure this, Anderson

et al. developed the Sense of Power Scale, which can be applied to any specific context or measure on a general level, across all contexts and relationships.

Nevertheless, the common element among the definitions of power in the literature is the capacity for control, and thus power has relatively clear conceptual clarity. Furthermore, having high power as opposed to low power is in and of itself a form of hierarchy differentiation, and so the possession of power can be exactly what makes an individual considered to have high status in a hierarchy. Is it for this reason that power is relevant to our discussion of the meaning of status, however we will return to the meaning of the term status later.

Dominance

Dominance, in contrast to power, refers to a type of behaviour and the responses that are elicited from others as a result of that behaviour. Henrich and Gil-White (2001) defined dominance as the induction of fear through some form of agonism, such as aggression, intimidation, or violence. Essentially, these authors argued that dominance involves using force or the threat of force as a means of gaining status. Others have followed suit in defining dominance as a strategy for acquiring rank using coercion, intimidation, or imposition to induce fear (Cheng & Tracy, 2014; Cheng et al., 2013). Individuals who are successful in obtaining a position of dominance over others receive submission and deference from them (Henrich & Gil-White, 2001), and have the capacity to influence them (Cheng & Tracy, 2014). Incidentally, dominance behaviours are observed not just in adults, but also in children (Strayer & Trudel, 1984), and other animals (Eibl-Eibesfeldt, 1970; Lorenz, 1964).

Given that dominance involves particular types of behaviour, it can therefore be a behavioural tendency, and this tendency has received a fair amount of attention from personality psychologists. Dominance as a personality trait is typically defined as having a tendency towards assertiveness or forcefulness in one's behaviour with others (Anderson & Kilduff, 2009b), and many personality scales measuring trait dominance have been

developed. For instance, Buss and Craik (1980) investigated prototypically dominant acts, and the most prototypical acts of dominance usually involved taking charge of others, for example "He/she issued orders that got the group organized". The California Personality Inventory (CPI) (Gough & Bradley, 1996) has a dominance subscale, which entails characteristics such as leadership, confidence, assertiveness, and persuasiveness. The Personality Research Form (Jackson, 1974) similarly describes an individual who scores highly on the dominance subscale as someone who has a tendency towards control, influence, leadership, and expressing opinions forcefully. Ray (1981) conceptualised dominance along these same lines, and on this basis developed the General Population Dominance scale. The Social Potency subscale of the Multidimensional Personality Questionnaire (Tellegen, 1999) measures the tendency to be forceful and decisive, persuasiveness, the tendency to influence others, take up leadership roles, and taking charge of others. The Sixteen Factor Personality Questionnaire (16PF) (Russell & Karol, 2002) also has a dominance subscale, which measures the tendency to be forceful, assertive, aggressive, competitive, stubborn, and bossy. Similarly, the Pleasure-Arousability-Dominance Scales (Mehrabian, 1996) characterise dominance as having a sense of control and influence, and being higher on "anger, relaxation, power, and boldness" (p. 263).

In sum, the various operationalisations of dominance discussed above tend to share the element of assertiveness as a means of controlling or influencing others. In this sense dominance is distinct from power in that it is not necessarily the capacity for control over people or resources, but rather a type of behaviour. However, the two are closely related, because dominance behaviours may have power as their outcome. Johnson et al. (2012) argued that the dominance behavioural system serves the purpose of controlling social and material resources, which is equivalent to power, and that the dominance motivation is the drive to pursue power. They argue that dominance behaviours are simply those that are enacted in order to attain power, but that they can include both aggressive as well as prosocial

behaviours, such as coalition building. Thus dominant individuals might also have power, and powerful individuals might behave in a dominating way. However, both can occur without the presence of the other.

Like power, dominance is a concept relevant to hierarchy. As some of the authors discussed above have argued, dominance is a type of status (Henrich & Gil-White, 2001) or strategy for gaining rank over others through forceful means (Cheng & Tracy, 2014; Cheng et al., 2013), and can have power or influence as its outcome. Thus we could say that dominant individuals are high-status individuals who receive deference from others, but do so through coercive or forceful means.

Prestige

Another concept relevant to status is prestige. Barkow (1989) defined prestige as having the respect and approbation of others, which is gained through having culturally valued skills and abilities. He argued that the capacity for prestige evolved out of agonistic primate dominance, and that this is the basis of humans' sense of self-esteem. Building on Barkow's work, Henrich and Gil-White (2001) also distinguished prestige from dominance, and defined prestige as having influence that is gained through the respect or admiration of others. Prestige is gained by being seen as someone worthy of emulation or as an attractive coalition partner, rather than through the use of force or the threat of force to gain deference. Henrich and Gil-White (2001) argued that having prestige, unlike having dominance, does not involve being feared, and is thus receiving "freely conferred deference" (p. 165). Henrich and Gil-White's ideas about dominance and prestige as two types of status have since been taken up by other authors with the dominance-prestige account of social rank acquisition (Cheng & Tracy, 2014; Cheng et al., 2013; Halevy, Chou, Cohen, & Livingston, 2012). Cheng et al. (2013) define dominance and prestige as two alternative *strategies* for obtaining rank. A similar distinction has been made in the literature on children, with Hawley (2002) describing

coercive and prosocial strategies used by pre-schoolers to obtain control of resources in a play situation.

As we have seen, prestige is distinct from dominance because unlike dominance, prestige does not involve force or the threat of force. It is also distinct from power because, although prestige might involve influence as an outcome due to the deference received from others, it does not involve the ability to control others. Any influence prestigious individuals have is conferred freely on them by others. Unlike dominance and power, prestige is only conferred freely by others if one possesses skills or abilities that are valued and respected. However, it is possible for powerful individuals to also have prestige and vice versa, but the two do not necessarily accompany each other (Cheng et al., 2013). What this discussion shows is that much like power and dominance, prestige has a clear meaning in the psychological literature. Like dominance, prestige can be defined as a type of status (Henrich & Gil-White, 2001) or strategy for gaining rank (Cheng & Tracy, 2014; Cheng et al., 2013). Therefore prestigious individuals are high-status individuals who receive deference from others, but only through the conferral of others who respect and admire them.

Status

As seen above, the concepts of power, dominance, and prestige all have reasonably clear and distinct meanings within the literature, and are all somehow related to the concept of status. However, as some authors have pointed out (Blader & Chen, 2014), the term "status" itself has often not been clearly defined. Cheng et al. (2013) catalogue how status, dominance, prestige, and power have been defined within sociology, social and personality psychology, sociobiology/biology, and evolutionary psychology, and highlight that these terms have sometimes been defined differently across these fields. Furthermore dominance, prestige, and power have all been used interchangeably with status in at least one of these fields. Thus there is a lack of conceptual clarity on the meaning of the term "status", since it is not clearly differentiated from these related concepts. This inconsistency across fields is

potentially problematic for inter-disciplinary research, or for any researchers looking to draw on research from other fields.

Looking more closely at the literature on status, we find a variety of definitions of the term. Early on, Benoit-Smullyan (1944) defined status as relative position in a hierarchy, and argued that there are an infinite number of ways in which individuals can be compared and ranked as superior or inferior, but that there are three fundamental types of status in most societies – economic, political, and prestige. Along similar lines, Barkow (1989) defined status as either relative standing, or possibly a formal position in a social organisation. Barkow also emphasised prestige as a type of status, although different statuses can vary in the amount of prestige associated with them, and having high status may or may not involve having power. Other authors have been equally broad in their definition of status, with some treating rank and status synonymously (Buss, 2008; Gilbert, 1992). Gilbert (1992) allowed diversity in the definition of rank in that it could mean: "social power, dominance, status, respect, prestige, and authority" (p. 150). As we saw earlier, Henrich and Gil-White (2001) defined high status individuals as being receivers of privileges or deference, and that prestige and dominance are two types of status. We also saw that Cheng et al. (2013) used this conceptualisation as the basis for their dominance-prestige account, although they used the term 'rank' rather than status. Cheng et al. (2013) defined rank as having influence and receiving attention received from others, and that influence is "the ability to modify others' behaviors, thoughts, and feelings" (p.104). Others have similarly used influence in their definition of status (Anderson, John, Keltner, & Kring, 2001; Kafashan, Sparks, Griskevicius, & Barclay, 2014; Ridgeway & Correll, 2006). Some authors (Kafashan et al., 2014) who have also been broad in the their definition of status have explicitly included concepts such as socioeconomic status, social class, and resource-holding potential in their definition. Socioeconomic status, which incorporates income, education, and occupation (Adler et al.,

1994), is perhaps what comes to mind when some people think of the term status, but as we can see from the preceding discussion, it is only one form of status among many.

The above discussion shows that the term "status" has been defined broadly by numerous psychologists. It appears that status is often used as an umbrella term, where related concepts such as dominance, prestige, and power are not necessarily being used as equivalent to status, but rather as types of status or means of gaining status. Moreover, some use the term "rank" in the same way as some use the term "status". Thus when "status" is defined broadly and loosely enough, it can include all these concepts as types of status. Using such a broad definition is not necessarily problematic, unless any single one of these concepts is mistakenly treated as equivalent to status to the exclusion of all others. As we saw earlier, the term has often overlapped with or been used interchangeably with related constructs such as power, dominance, and prestige (Cheng et al., 2013), which is problematic. As long as the broad use of the term status is understood as existing in many forms, then there is no inconsistency. However, there is still no consensus on a broad definition of status, because even the authors who define it broadly do not necessarily present a core definition.

However, despite there being many authors who define status broadly, it is common within the social psychology literature to distinguish status from power by defining status in much the same way as prestige – that is, status as having the respect, admiration, and esteem of others (Anderson et al., 2015; Anderson & Kilduff, 2009a; Benoit-Smullyan, 1944; Blader & Chen, 2012, 2014; Fast, Halevy, & Galinsky, 2012; Fiske, 2010; Fragale, Overbeck, & Neale, 2011; Hays, 2013; Keltner et al., 2003; Lovaglia & Houser, 1996; Magee & Galinsky, 2008; Ridgeway & Correll, 2006). Similarly, Kemper (1991) distinguishes power and status by saying that powerful individuals get their way through the involuntary compliance of others, while for high-status individuals, that compliance is voluntary. Some who define status in this way also emphasise the importance of influence and attention or prominence in the definition of status (Anderson et al., 2001; Anderson & Kilduff, 2009a), as well as

receiving voluntary deference and having perceived instrumental social value (Anderson et al., 2015).

It is important to note here, however, that this conceptualisation of status as prestige differs from the notion of prestige in the dominance-prestige account described earlier. The dominance-prestige account views dominance and prestige as being two different strategies for obtaining status (Cheng et al., 2013; Henrich & Gil-White, 2001). Blader and Chen (2014) acknowledged that their concept of status is very close to the notion of prestige, however they argued that the two concepts are in fact distinct. In Blader and Chen's conceptualisation, prestige is an antecedent to social rank since it is a strategy used for obtaining rank, whereas status and power are the dimensions of social rank. Thus even the term prestige differs substantially in its conceptualisation by some authors, in either being defined as a strategy for obtaining rank, or as being part of the definition of status.

The Present Study

As shown above, there are a variety of competing conceptualisations of status. On the one hand there is the view that status can take many forms or can be acquired through different means, such as power, dominance and prestige. On the other hand, there is the reasonably widespread view that status is equivalent to or similar to the concept of prestige. Consequently, as others have argued (Blader & Chen, 2014) there is a clear need for consensus on the definition of status within the psychological literature. The question that requires addressing, however, is whether it is appropriate to adopt the word "status" to refer to prestige or a similar construct, or whether the word status should be a broad term encompassing different types of status or strategies for acquiring status, including power, dominance, and prestige. In order to contribute to resolving this problem, we examined the understanding of the term "status" in the minds of the general population in order to gain some insight into its meaning in common usage. We investigated whether any of the themes of power, dominance, or prestige were predominant in laypeople's understanding of the term,

and also investigated whether there were any other conceptualisations of status not falling into any of these categories. This might offer some assistance in deciding whether it is appropriate to equate status with prestige, or whether to define the term status more broadly. This has implications for any research making use of the term "status" either directly with participants, or just in theorising about the concept. Currently there is no known research investigating laypeople's understanding of status, and therefore this study is the first of its kind.

In order to investigate laypeople's understanding of status, we asked a broad sample of participants a series of ten open-ended questions on the topic. The first question simply asked participants "*Having "high status" to me means:*" with the intention of understanding what people think high status means – how status is defined and what characterises it. We also asked participants the question "*I would like to have high status so I can:*" in order to understand whether the things that they desire from having high status reflect benefits relating to any particular conceptualisation of status. We further asked participants four separate questions on what they think are the advantages and disadvantages of both high and low status. The purpose of these questions was partly to further explore participants' understanding of the nature of status, but also to examine an argument from evolutionary theory about costs and benefits of high and low status. According to evolutionary theory, status hierarchies exist because high status has various survival and reproductive benefits, but the competition for high status can also be costly, and not all individuals are capable of attaining high status (Buss, 2008). Therefore, we expect that participants might also identify costs of high status and benefits of low status. We also asked participants the questions "*If I had high status I would:*" and "*If I had high status other people would:*" with the intention of examining how the consequences of high status would be characterised in their expectations of their own behaviour and others' behaviour towards them. We also examined what participants think that striving for status and not caring about status reveals about a person with the questions "*People who do not care about having high status are:*" and "*Aspiring to*

have high status reveals that a person is:". All of these questions were asked with the intention of examining whether any particular definition of status was predominant, or whether there are simply multiple ways of conceptualising status.

Method

Participants

A total of 115 participants responded to the first question, but by the end of the questionnaire there were only 86 participants in our sample. There were 56 women and 30 men, with an age range of 21-69 years (M = 36.7, SD = 11.5). There were 71 Australian citizens (two of which were dual Australian/UK citizens), five Europeans, four Americans, four New Zealanders, one Canadian, and one Hong Kong citizen. The majority of participants had European ethnicity (87.2%), with the remainder being 4.7% Asian, and 8.1% mixed ethnicity, other, or unknown.

Materials and Procedure

Participants were invited to take part in a larger study about social status via the internet. Advertisements for the study were shared with contacts on social media, where a wider sample was recruited using a "snowball" method by requesting that contacts share the link in their own networks. This was employed so that that the sample was of a broad range of ages and backgrounds, and in most cases unlikely to be known to the researcher. After being presented with the information statement, participants were presented with the ten open-ended questions about status presented above. They were then presented with some additional questions not reported on here, and then lastly asked for their demographic information.

Results

The dataset was analysed using an inductive approach (Thomas, 2006), whereby responses were coded by identifying themes within each set of responses and grouping them into higher-order categories. This process involves condensing a large amount of qualitative data into summary format on the basis of identifying categories or themes within the entire set of participant responses. This method was considered to be the most appropriate for this study since the purpose of the research is to determine the predominant understanding of "status" among laypeople. Two additional coders, blind to the initial coding, coded 25% of the responses on five questions each. They were given the instructions to "group similar responses together, i.e., identify general themes". There was agreement between coders on the meaning of items in almost all cases, with only two instances where the meaning of the participants' responses was understood as meaning different things by different coders. Other observed discrepancies often entailed synonyms of categories. For example, on one question the primary coder created a category called "personal qualities", and the second coder created a category called "skills". In some instances the second coder put items into one category, while the primary coder split items into multiple categories, or vice versa. For example, on one question the secondary coder created the categories "help-seeking" and "personal gain", while the primary coder put all such items into the "seek favours" category. All these differences were resolved through discussion, with consensus achieved on all responses.

Participant responses for each question summarised into higher-order categories are presented in Tables 1 to 10 (a more detailed summary of these results is presented in Appendix D). It is important to note that many participants had multiple responses in the same category, or responses with items in several different categories. Thus the frequencies listed in the tables are the number of times that theme is mentioned in the whole dataset, rather than the number of participants who mention it.

Responses to the question "*Having "high status" to me means:"* are shown in Table 1. Results indicate that being highly regarded by others is the most common understanding of status in this sample, with approximately a quarter of responses falling into this category. About half the number of such responses characterised status as having money or other material resources. Some responses involved explanations of how status is acquired, such as through one's job, reputation, or social class. Items in this group described the *ways* in which status is acquired as opposed to *what* is acquired when one has status. A slightly smaller portion of responses described power and influence, and the same number of responses mentioned social benefits such as attention and receiving priority. Slightly fewer participants described personal qualities of the individuals who have high status, suggesting that they see high-status individuals as people who possess characteristics such as notable achievements, expertise, or skills. Some participants simply gave a definition of what high status is, such as describing it as being of higher rank in some way. A small number of participants responded by describing personal benefits of high status that were neither social nor material benefits. Another small portion of responses explained what status means to them, and there were a small number of miscellaneous responses that did not fall into any other category. This miscellaneous category contained a few responses saying something negative, such as those suggesting that having high status involves arrogance or having negative consequences for the high-status individual.

Responses to the question "*I would like to have high status so I can:"* are shown in Table 2. Just over a quarter of responses were categorised as personal benefits, suggesting that people are most likely to desire high status for self-serving reasons. About one-fifth of participants talked about helping others, while a similar portion mentioned being highly regarded by others. A small percentage of participants responded by saying that they did not want high status, and similar percentage responded by describing power and influence. A

very small percentage described either material benefits, or social benefits such as

attractiveness and being liked.

Table 1

Responses to the question "Having "high status" to me means:" (n = 115)

Category	Examples	Freq.	% of total
Highly regarded	Respect, importance, highly regarded	79	25.3
Material benefit	Money, wealth, property	41	13.1
Means of attaining status	Job, reputation, class	36	11.5
Power/influence	Power, influence, leadership	34	10.9
Social benefit	Attention, given priority, popularity	34	10.9
Personal quality	Achievement, knowledge, skill	30	9.6
Definition of status	Rank, standing, position	22	7.1
Personal benefit	Privilege, access to education, opportunity	15	4.8
Meaning to me	Nothing, a big deal	11	3.5
Miscellaneous	Arrogance, responsibility, stressful to maintain	10	3.2
	Total:	312	100

Table 2

Responses to the question "I would like to have high status so I can:" (n = 108)

Category	Examples	Freq.	% of total
Personal benefit	Do what I want, have more opportunity	47	27.5
Help/benefit others	Help others, positively influence others	35	20.5
Highly regarded	Be respected, admired, listened to	32	18.7
Not wanted/not important	Not wanted, not important to me	21	12.3
Power/influence	Influence, change things	20	11.7
Material benefit	Have money, financial freedom	9	5.3
Social benefit	Be romantically attractive, acceptance	7	4.1
	Total:	171	100

Tables 3 and 4 show the responses to the questions about the advantages and disadvantages of high status. As seen in Table 3, the most common type of response to the question "*The advantages of having high status include:*" was being highly regarded, followed by personal benefits. Responses relating to power and influence were also mentioned by a substantial number of participants, as were social benefits. Material benefits were only mentioned by a small percentage of participants. Compared to the first two questions, power was a much more common response on this question. The question "*The disadvantages of having high status include:*" showed that people thought that many of the disadvantages of high status come from others (Table 4). A quarter of participants responded with statements that described receiving negativity from others, such as judgments and

criticisms. Other categories relating to interactions with others were demands from others, increased attention, social isolation, and threat from others. Almost a quarter mentioned the personal cost of pressures around having and maintaining a high status position.

Table 3

Responses to the question "The advantages of having high status include:" (n = 97)

Category	Examples	Freq.	% of total
Highly regarded	Respect, being listened to, recognition	62	26.5
Personal benefit	Opportunity, freedom, good job	52	22.2
Power/influence	Power, influence, change world	47	20.1
Social benefit	Favours done for you, connections	45	19.2
Material benefit	Money, financial security, well-paid job	24	10.3
Miscellaneous	None, nothing, possibly a bad person	4	1.7
	Total:	234	100

Table 4

Responses to the question "The disadvantages of having high status include:" (n = 96)

Category	Examples	Freq.	% of total
Negativity from others	Scrutiny, judgment, criticism, jealousy	50	25.3
Personal cost	Responsibility, maintaining it, pressure	46	23.2
Demands from others	Higher expectations, attract freeloaders	30	15.2
Attention	Attention, lack of privacy, media attention	29	14.6
Social isolation	Fake friends, loneliness, treated differently	17	8.6
Threat from others	Taken advantage of, targeted	10	5.1
Miscellaneous	Corruption, none, don't know	16	8.1
	Total:	198	100

Tables 5 and 6 show the responses to the questions about the advantages and disadvantages of low status. The question "*The advantages of having low status include:*" showed that just over a quarter of responses described receiving less demand from others, and just under a quarter of responses described receiving less attention from others (Table 5). A portion of participants also mentioned having an easier, simpler, and quieter life. Another portion mentioned various special benefits that relate specifically to having a low status position. A small portion mentioned more freedom and more social connection, and less negativity from others. Almost a quarter of responses to the question "*The disadvantages of having low status include:*" mentioned having low regard (Table 6). About a fifth mentioned

having less power and influence. A portion of responses mentioned material costs, or personal costs such as less opportunity. A portion also mentioned being treated badly by others, and a small portion also mentioned social and emotional costs.

Table 5

Responses to the question "The advantages of having low status include:" (n = 93)

Category	Examples	Freq.	% of total
Less demand	Less expectations, less pressure	46	26.4
Less attention	Anonymity, under the radar, invisibility	43	24.7
Easy life	Simplicity, quiet life, keep to yourself	20	11.5
Special benefit	Can always go up, herd protection	16	9.2
Freedom	Be yourself, freedom, live own life	14	8.0
Social connection	Relate to more people, secure friendships	12	6.9
Less negativity from others	Less scrutiny, less fear of judgment	10	5.7
Miscellaneous	None, can't think of any, not many	13	7.5
	Total:	174	100

Table 6

Responses to the question "The disadvantages of having low status include:" (n = 91)

Category	Examples	Freq.	% of total
Low regard	Less respect, ignored, not listened-to	49	23.7
Powerless	Less influence, powerlessness, less control	41	19.8
Material cost	Less money, less access to resources	33	15.9
Personal cost	Less opportunity, poor health care	25	12.1
Treated badly	Judged, discriminated against, exclusion	22	10.6
Social cost	Anonymity, less friends, less individuality	18	8.7
Emotional cost	Low self-worth, feeling unimportant	15	7.2
Miscellaneous	Opposite of high status, none	4	1.9
	Total:	207	100

Tables 7 and 8 show responses for participants' expectations about the consequences of having high status for themselves, and others' responses towards them. The most common category of responses to the question "*If I had high status I would:*" was helping others in some way, as seen in Table 7. Almost a quarter of responses said that they would create changes in the world or influence the world in some way. Many responses in the change/influence category involved doing good, but they were coded here rather than in the "help others" category if they implied some kind of power or influence. A smaller percentage

142

mentioned some personal benefit such as doing something to benefit themselves or to enjoy

life. A small percentage said having high status would not change anything for them, and a

very small percentage mentioned material benefits of status. A very large proportion of

responses to the question *"If I had high status other people would:"* (Table 8) indicated that

participants believed having high status would mean that they would be highly regarded by

others. Small portions of responses mentioned receiving negativity from others, receiving

social benefits, and having others seek favours from them.

Table 7

Responses to the question "If I had high status I would:" (n = 89)

Category	Examples	Freq.	% of total
Help others	Help others, donate, promote equality	44	30.1
Change/Influence	Make change, use power for good	35	24.0
Personal benefit	Enjoy life, work in a job I enjoy, travel	26	17.8
No different	Not change anything, live modestly	15	10.3
Material benefit	Not have debt, earn more money	8	5.5
Miscellaneous	I don't know, do the best I could	8	12.3
	Total:	146	100

Table 8

Responses to the question "If I had high status other people would:" (n = 87)

Category	Examples	Freq.	% of total
Highly regarded	Listen to me, respect me, take notice	57	41.0
Negativity from others	Envy me, try to bring me down, judge me	20	14.4
Social benefit	Want to be friends, cooperate with me	18	12.9
Seek favours	Seek my help, be fake friendly	18	12.9
Miscellaneous	I don't know, treat me differently	26	18.7
	Total:	139	100

The final two questions revealed participants' thoughts on individuals who do and do not care about having high status. The question "*People who do not care about having high status are:*" (Table 9) revealed that just over a quarter of responses discussed having some positive personal quality, while about a fifth mentioned being happy or content with oneself as a reason for not caring about high status. Small portions of responses gave a positive evaluation of such individuals, or the explanation that people who do not care about high status are uninterested in status or interested in other things. Even smaller portions of responses simply said that not caring about high status is normal, indicates something negative about the person, or that those individuals already have high status. A large portion of responses to the question "*Aspiring to have high status reveals that a person is:*" (Table 10) said something negative about such individuals, while just a slightly smaller proportion said something positive, mostly along the lines of being ambitious. A small portion said

something neutral and a very small number said that it depends on their motivation for seeking the status.

Table 9

Responses to the question "People who do not care about having high status are:" (n = 88)

Category	Examples	Freq.	% of total
Positive quality	Confident, free, relaxed, sensible, real	43	28.3
Happy	Happy with current status, content	30	19.7
Positive evaluation	Awesome, good people, interesting	18	11.8
Uninterested	Uninterested, don't care what others think	17	11.2
Normal	Normal, human, people	10	6.6
Negative evaluation	Lack ambition, complacent, oblivious	9	5.9
Already high status	Have high status already	6	3.9
Miscellaneous	Unable to reach it, might be lying	19	12.5
	Total:	152	100

Table 10

Responses to the question "Aspiring to have high status reveals that a person is:" (n = 88)

Category	Examples	Freq.	% of total
Negative quality	Shallow, narcissistic, self-centred	82	42.1
Positive quality	Ambitious, motivated, driven, intelligent	79	40.5
Neutral	Competitive, normal, desire influence	22	11.3
Depends	Depends on their motivation	7	3.6
Miscellaneous	Not sure, possibly misinformed	5	2.6
	Total:	195	100

Discussion

The responses to the open-ended questions in this study reveal a variety of conceptualisations of status among laypeople. The theme most closely relating to prestige, which we called being "highly regarded", arose most commonly when we asked participants what high status means to them, what the advantages of high status are, and what others would do if they had high status. When we asked participants about the disadvantages of low status, we found that the converse – having the low regard or others – was the most common response. Being highly regarded also arose as the third most common category when participants discussed why they would like to have high status. Given that the theme of being highly regarded by others was one of the most common themes in several questions, this suggests that many people view high status as having the respect, admiration, and esteem of others, which is in line with the literature that defines status in this way (Anderson et al.,

2015; Anderson & Kilduff, 2009a; Benoit-Smullyan, 1944; Blader & Chen, 2012, 2014; Fast et al., 2012; Fiske, 2010; Fragale et al., 2011; Hays, 2013; Keltner et al., 2003; Lovaglia & Houser, 1996; Magee & Galinsky, 2008). However, the overall proportion of such responses when they occurred was usually just a quarter, with the exception of the question "*If I had high status other people would:*", where it was 41%. Thus the number of responses that characterised status as meaning something other than prestige suggests that prestige is not necessarily the meaning of the word "status" in everyday usage, but just one, albeit common, way of conceptualising status.

The theme of power and influence also arose numerous times, with a fairly substantial portion of participants mentioning it when discussing the advantages of high status. A small portion of participants also mentioned power and influence when asked what high status means to them, and when discussing why they would like to have high status. When asked what they would do if they had high status, almost a quarter of participants discussed making change or influencing others in some way, which is essentially exercising power (although some responses specifically mentioned doing this for the purpose of benefitting others rather than for simply personal benefit). When participants discussed the disadvantages of having low status, powerlessness came up as the second most common category, with only slightly less responses than low regard. The prominence of the theme of power in our results suggest that power is commonly seen as being a characteristic of status, and that the term "status" is not understood as being in contrast with the concept of power. This suggests that the use of the terms "status" and "power" as describing separate and contrasting concepts, which is commonly done (Anderson et al., 2015; Anderson & Kilduff, 2009a; Benoit-Smullyan, 1944; Blader & Chen, 2012, 2014; Fast et al., 2012; Fiske, 2010; Fragale et al., 2011; Hays, 2013; Keltner et al., 2003; Lovaglia & Houser, 1996; Magee & Galinsky, 2008), is perhaps not in line with the understanding of the terms in the general population. While researchers might like to separate status and power into discrete concepts, our findings suggest that the concepts

are interwoven in people's minds, and that the term status commonly invokes the concept of power. Therefore the understanding of status found here is consistent with literature that has defined status broadly, and as potentially involving power (Barkow, 1989; Gilbert, 1992). Furthermore, the prominence of the theme of influence in our results is consistent with those who define rank or status as involving influence (Anderson et al., 2001; Cheng et al., 2013; Kafashan et al., 2014; Ridgeway & Correll, 2006). Power and influence are not typically treated as synonymous within the literature (Blader & Chen, 2014), since power involves having control, whereas influence might involve having the capacity to affect others through their voluntary compliance. Nonetheless, participants did not make such a distinction, and in practical terms, any responses involving power, control, or influence as a characteristic of status involves having the capacity to determine outcomes, regardless of whether others' compliance is voluntary. They were therefore considered as belonging to the same higher-order category in this study, and as being meaningfully qualitatively different from the other categories of responses in the analysis. This interpretation does not imply that power and influence are necessarily the same thing, but that in laypeople's understanding, the concept of status is interconnected with the capacity to determine outcomes in some sense.

The findings also show that status was clearly seen as something desirable since it was associated with a variety of benefits. Material benefits such as money and property were mentioned frequently. It was the second most common category when participants were asked what high status means to them, and mentioned by a small portion of participants when asked why they would like to have high status, what the advantages of high status are, and what they would do if they had high status. When participants discussed the disadvantages of having low status, material costs came up as the third most common category. This suggests that to some extent the concept of high status is associated with material wealth by a reasonable portion of individuals. Material wealth is not typically considered part of the definition of status in the psychological literature (Anderson et al., 2015), however economic

status was considered to be one of the fundamental types of status by Benoit-Smullyan (1944). Socioeconomic status was also considered to be a type of status by Kafashan (2014). While material wealth is one potential aspect of status, it is not argued on the basis of this finding to be central to the definition of the concept. However these findings do suggest that material benefits are at least associated with status in the lived experience of status in laypeople's minds.

On the other hand, social benefits such as attention, popularity, priority, and favours received from others also arose in several questions. Responses such as 'popularity' were coded under the social benefits category, however only a small percentage of participants responded with this when describing the meaning of status, suggesting that status and being liked by many people are not generally thought of equivalently. Nonetheless, various social costs and benefits arose frequently across many of the questions. A substantial portion of responses mentioned social benefits when discussing the advantages of high status. A small portion of participant responses mentioned social benefits when discussing what high status means to them and why they would like to have high status. Social benefits were also mentioned when participants discussed what they think other people would do if they had high status, however a common response in this category was also the converse – receiving negativity from others. The category of negativity from others was also the most common category in response to the disadvantages of high status, and included responses such as increased scrutiny and judgment, as well as jealousy. Less negativity from others, such as less scrutiny and judgment, was also given in a small portion of responses to the question on the advantages of low status. Greater social connection, such as being able relate to more people, came up in a small portion of responses when participants discussed the advantages of having low status. Conversely, when participants discussed the disadvantages of having high status, social isolation came up in a small portion of responses, and social costs came up in a small portion of responses when participants discussed the disadvantages of having low

status. These findings suggest that to some extent high status is associated with being socially disconnected. Less attention also came up in a large portion of responses as an advantage of low status and more attention came up as a disadvantage of high status for a portion of responses, indicating that more attention is not always a good thing and unwanted attention can be seen as a bad thing. These findings are in line with research that includes attention, prominence, and visibility as characteristics of status (Anderson et al., 2001). Receiving priority and favours are essentially acts of deference from others, and this conceptualisation of status is in line with Henrich and Gil-White's (2001) notion of status as a hierarchy of rewards, where high-status individuals are the receivers of deference displays.

Another category that arose in several questions was personal benefits, which included responses such as freedom, opportunity, privileges, and so forth. This was the most common type of response when participants were asked why they would like to have high status. It was the second most-common answer when participants discussed the advantages of high status, a common response when participants described what they would do if they had high status, and was also mentioned a small portion of times when participants described what high status means to them. Conversely, personal cost was the second most common category when describing the disadvantages of high status, and mentioned in a small portion of responses on the disadvantages of low status. In response to the question on the advantages of low status, many of the responses involved various personal benefits, although these were grouped according to the type of benefit since there were many responses of this kind. These included having less demands, having an easier life, various special benefits arising specifically from low status, and more freedom. Conversely, the third most common category on the disadvantages of high status was greater demands from others. In response to this question, a small portion of participants also mentioned threats from others. Other personal costs that were mentioned by small portions of participants when discussing the disadvantages of high status were being treated badly and emotional costs. These personal

benefits of status are also in line with Henrich and Gil-White's (2001) conceptualisation of status, where high-status individuals are receivers of rewards and privileges.

When asked what participants would do if they had high status, the most common category of responses was to help others in some way. When participants were asked why they would like high status, helping others was the second most-common theme after personal benefits. This is congruent with literature that has found that high-status individuals are more likely to help others than low-status individuals in some situations (Kafashan et al., 2014). However, in response to the question "If I had high status other people would:", a small portion of participants responded by saying that others would seek favours from them. This suggests that people recognise that having high status results in others expecting to receive help.

When participants were describing the meaning of status to them, there was a small portion of responses describing it as having some personal quality such as achievements, knowledge, or skill. This shows that some people conceptualise status as being superior in some regard, however this has not been described in terms of prestige or respect. This suggests that simply being recognised as superior in some way is another possible way of conceptualising status, and that recognising someone as high status because they are superior in some regard in the absence of respect, admiration, or deference towards that person might be possible. The implication for those who conceptualise status as prestige (Anderson et al., 2015; Anderson & Kilduff, 2009a; Benoit-Smullyan, 1944; Blader & Chen, 2012, 2014; Fast et al., 2012; Fiske, 2010; Fragale et al., 2011; Hays, 2013; Keltner et al., 2003; Lovaglia & Houser, 1996; Magee & Galinsky, 2008) might be that in hierarchies based on prestige, the amount of respect or deference given to high-ranking individuals is not necessarily directly related to the recognised value or quality of skills they have. Someone with superior skills might be recognised as superior in the absence of respect, admiration, deference, or any positive feelings at all. Therefore there might be hierarchies based on the possession of

valued skills and abilities, which is what prestige is based on, but that do not involve prestige. Superiority could be recognised, but rather than being accompanied by respect and admiration, it could be accompanied by resentment, envy, and the desire to compete for superiority. In fact, it might be that the recognition of someone as superior in *some* regard that is potentially at the core of the definition of status, and what is common to all types of status.

A small portion of participants also simply defined status as rank, standing, and position, and a slightly larger portion also described some of the means of attaining status, such as through one's job, reputation, or social class. These responses are in line with Benoit-Smullyan's (1944) definition of status as relative position in a hierarchy, and Barkow's (1989) definition as relative standing or a formal position in a social organisation.

In response to the question "People who do not care about high status are:", there was an overwhelmingly large amount of responses describing such individuals in a positive way. The top three categories described these individuals as having some positive quality, being happy as they are, or simply evaluated them in a positive way. A small portion also explained that such individuals are simply uninterested in status or that they are normal human beings. A small number of responses also explained this by saying that people who do not care about high status already have it. Most notably, only a small portion of responses evaluated people who do not care about high status in a negative way, suggesting that by and large, not caring about status is seen as a positive quality. Negative evaluations were also made of people who aspire to high status, with over 40% of participants responding to the question "*Aspiring to have high status reveals that a person is:*" by describing some negative quality. However, only a slightly lower portion of responses described a positive quality, showing that the aspiration for high status is generally seen as being equally good and bad. A small portion of responses also described qualities that were of a neutral evaluation. While these last two questions did not result in responses that related directly to our research question on the

meaning of status, they did reveal participants' evaluations of individuals who do and do not care for high status. This finding that people who do not care about status are evaluated very positively and that there were a great deal of negative evaluations of people who aspire for high status is in line with recent research that found that people who strive for status are evaluated more negatively than those who strive for status less (Kim & Pettit, 2015).

While there were no categories in our results that were named dominance, the category we named "power/influence" contained aspects of the dominance construct, such as leadership and authority. Notoriously absent in our findings were characteristics relating to forcefulness, aggression, intimidation, and the induction of fear, which characterises dominance in the accounts of those who view dominance and prestige as types of status or strategies for gaining rank (Cheng & Tracy, 2014; Cheng et al., 2013; Henrich & Gil-White, 2001). Although our findings do not in any sense dismiss this conceptualisation of dominance as a strategy for gaining rank, they do suggest that this conceptualisation does not come to mind readily when laypeople consider the term "status". Were such a conceptualisation of status presented to a general sample, participants may well recognise this as a form of status or strategy for gaining rank. Future research could investigate this possibility.

The responses from participants about the advantages and disadvantages of high and low status indicate that they recognised that high status has benefits, and low status has costs. The responses to these questions indicated that participants believed that high status has many benefits, and that low status involves missing out on those benefits. This is in line with evolutionary theory (Buss, 2008), which argues that status hierarchies exist because individuals compete to get high status in order to acquire the survival and reproductive benefits that come with that position. However, our results also revealed that participants recognised the costs associated with high status, and the benefits that can come from having low status. Responses to these questions indicated that participants believed that high status

involves various demands, and that low status involves freedom from these demands. This is in line with the argument from evolutionary theory that since the competition for status is potentially costly, some individuals should simply accept lower status, because avoiding the costs associated with competing for high status when one cannot attain it is the most adaptive thing to do for such individuals (Buss, 2008).

Summary and Implications for Current Research on Status

Overall, our results show that participants understand status as a broad, multi-dimensional construct that can come in different forms, including prestige, power and influence, and can be accompanied by material, social, and personal benefits. Our findings are consistent with those who have defined the term "status" broadly (Benoit-Smullyan, 1944; Buss, 2008; Gilbert, 1992; Henrich & Gil-White, 2001; Kafashan et al., 2014). However our findings pose a challenge to those who have defined status as prestige (Anderson et al., 2015; Anderson & Kilduff, 2009a; Benoit-Smullyan, 1944; Blader & Chen, 2012, 2014; Fast et al., 2012; Fiske, 2010; Fragale et al., 2011; Hays, 2013; Keltner et al., 2003; Lovaglia & Houser, 1996; Magee & Galinsky, 2008), suggesting that defining status only in this way is not in line with the general understanding of the term among laypeople, at least in this sample. The implication of this might be that if researchers were to use the term "status" directly with participants with the expectation that this refers to prestige or something like prestige, then they might be mistaken in how participants are understanding and using the term. Furthermore, this shows that defining status as prestige is not in line with the everyday, general use of the term, which has the potential to lead to confusion, particularly in cross-disciplinary research, since other fields might not use this definition (Cheng & Tracy, 2014).

While many psychologists have treated power, dominance, prestige, and other forms of status as separate constructs, our findings show that the lived experience of status is not quite in line with this demarcation. This study has shown that many different characterisations of "status" are prominent in laypeople's minds, and that they frequently co-

occur. The implication of this finding is that if researchers are to use the term status with participants, they may be invoking concepts that they do not necessarily intend to invoke. For example, we found that material benefits arose quite reliably in participants' minds when discussing status. Thus while researchers might not be intending to measure or manipulate this concept, they may inadvertently be doing so if using the term "status" with participants. The same could be true of power or any of the other common concepts that arose in this study. This finding that status is generally understood as a broad and multi-faceted concept demonstrates the value of qualitative research in revealing the psychology of social status in a way that quantitative research is limited in doing.

Limitations

Some of the limitations of this study are that the sample was reasonably small, and also consisted mostly of Australian citizens with European backgrounds. Therefore the results cannot be generalised too broadly, and only give us a preliminary picture of the understanding of the term "status" within this population. Furthermore, the open-ended nature of the questions also meant that each participant could give several responses. If the questions were limited to one answer only or were a forced-choice or rank-order format, we could ascertain which conceptualisation of status is strongest for each individual, and allow a clearer picture of which understanding of status is predominant more generally. Nonetheless, the fact that many participants gave multiple answers across categories suggests that even for each individual there are multiple ways of defining status. In this sense, rather than necessarily being a limitation, this result supports the conclusion that status is a multi-faceted construct that can occur in many different forms.

Conclusions

The results of this study suggest that there is not one single definition of status in the everyday usage of the term among laypeople. While it was common for participants to define status in terms of prestige, there were many more conceptualisations of the term. We found

that as well as prestige, status was also frequently conceptualised as involving power and influence, material wealth, social benefits, and various other personal benefits. Furthermore, our findings provide insight into the lived experience of status in the minds of laypeople. The results show that status is understood as a broad and multi-faceted construct that can take many forms, which cannot necessarily be separated into discrete constructs. If everyday usage of a term can offer any guide in resolving the debate on how the term should be defined in psychology, our research suggests that the word "status" should be retained as a broad term that can take many forms, while the term "prestige" should relate to status that involves high regard, respect, or admiration. This conclusion supports the position that there are different types of status, of which power, dominance, and prestige, might be a few types among many. The question this then raises is how the term "status" as a broad concept should be defined. We suggest that the broad definition could simply be something along the lines of being in a position of superiority over others on some socially asymmetric dimension (Henrich & Gil-White, 2001), and an umbrella term that can include many different types. While this conclusion is clearly more applicable in Australia, where this study was conducted, a similar result may be found in other English-speaking countries, and future research should examine this possibility. This conclusion therefore does not pose any problem for research that has left the meaning of the term "status" broad. However, this does indicate the need to specify the different types of status when conducting research on the topic.

References

Adler, N. E., Boyce, T., Chesney, M. A., Cohen, S., Folkman, S., Kahn, R. L., & Syme, S. L. (1994). Socioeconomic status and health: The challenge of the gradient. *American Psychologist, 49*, 15-24.

Anderson, C., Hildreth, J. A. D., & Howland, L. (2015). Is the desire for status a fundamental human motive? A review of the empirical literature. *Psychological Bulletin, 141*, 574-601.

Anderson, C., John, O. P., & Keltner, D. (2012). The personal sense of power. *Journal of Personality, 80*, 313-344.

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.

Barkow, J. H. (1989). *Darwin, sex, and status: Biological approaches to mind and culture*. Toronto: University of Toronto Press.

Benoit-Smullyan, E. (1944). Status, status types, and status interrelations. *American Sociological Review, 9*, 151-161.

Blader, S. L., & Chen, Y. R. (2012). Differentiating the effects of status and power: A justice perspective. *Journal of Personality and Social Psychology, 102*, 994.

Blader, S. L., & Chen, Y. R. (2014). What's in a name? Status, power, and other forms of social hierarchy. In J. T. Cheng, J. L. Tracy & C. Anderson (Eds.), *The psychology of social status* (pp. 71-95). New York: Springer.

Buss, D. M. (2008). *Evolutionary psychology: The new science of the mind* (3rd ed.). Boston: Pearson/Allyn and Bacon Publishers.

Buss, D. M., & Craik, K. H. (1980). The frequency concept of disposition: Dominance and prototypically dominant acts. *Journal of Personality, 48*, 379-392.

Cheng, J. T., & Tracy, J. L. (2014). Toward a unified science of hierarchy: Dominance and prestige are two fundamental pathways to human social rank. In J. T. Cheng, J. L. Tracy & C. Anderson (Eds.), *The psychology of social status* (pp. 3-27). New York: Springer.

Cheng, J. T., Tracy, J. L., Foulsham, T., Kingstone, A., & Henrich, J. (2013). Two ways to the top: Evidence that dominance and prestige are distinct yet viable avenues to social rank and influence. *Journal of Personality and Social Psychology, 104*, 103-125.

Eibl-Eibesfeldt, I. (1970). *Ethology: The biology of behavior*. New York: Holt, Rinehart and Winston.

Fast, N. J., & Chen, S. (2009). When the boss feels inadequate: Power, incompetence, and aggression *Psychological Science, 20*, 1406-1413.

Fast, N. J., Halevy, N., & Galinsky, A. D. (2012). The destructive nature of power without status. *Journal of Experimental Social Psychology, 48*, 391-394.

Fiske, S. T. (1993). Controlling other people: The impact of power on stereotyping. *American Psychologist, 48*, 621.

Fiske, S. T. (2010). Interpersonal stratification: Status, power, and subordination. In S. Fiske, D. T. Gilbert & G. Lindzey (Eds.), *Handbook of Social Psychology* (5th ed., pp. 941-982). New York: John Wiley & Sons, Inc.

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., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology, 85*, 453.

Georgesen, J. C., & Harris, M. J. (2000). The balance of power: Interpersonal consequences of differential power and expectancies. *Personality and Social Psychology Bulletin, 26*, 1239-1257.

Gilbert, P. (1992). *Depression: The evolution of powerlessness*. New York: The Guilford Press.

Gough, H., & Bradley, P. (1996). *CPI manual*. Palo Alto: Consulting Psychologists Press.

Halevy, N., Chou, E. Y., Cohen, T. R., & Livingston, R. W. (2012). Status conferral in intergroup social dilemmas: behavioral antecedents and consequences of prestige and dominance. *Journal of Personality and Social Psychology, 102*, 351.

Hawley, P. H. (2002). Social dominance and prosocial and coercive strategies of resource control in preschoolers. *International Journal of Behavioral Development, 26*, 167-176.

Hays, N. A. (2013). Fear and loving in social hierarchy: Sex differences in preferences for power versus status. *Journal of Experimental Social Psychology, 49*, 1130-1136.

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.

Jackson, D. N. (1974). *Personality research form manual*. Goshen: Research Psychologists Press.

Johnson, S. L., Leedom, L. J., & Muhtadie, L. (2012). The dominance behavioral system and psychopathology: Evidence from self-report, observational, and biological studies. *Psychological Bulletin, 138*, 692-743.

Kafashan, S., Sparks, A., Griskevicius, V., & Barclay, P. (2014). Prosocial behavior and social status. In J. T. Cheng, J. L. Tracy & C. Anderson (Eds.), *The psychology of social status* (pp. 139-158). New York: Springer.

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review, 110*, 265-284.

Kemper, T. D. (1991). Predicting emotions from social relations. *Social Psychology Quarterly, 54*, 330-342.

Kim, H. Y., & Pettit, N. C. (2015). Status is a four-letter word: Self versus other differences and concealment of status-striving. *Social Psychological and Personality Science, 6*, 267-275.

Lorenz, K. (1964). Ritualized fighting. In J. D. Carthy & F. J. Ebling (Eds.), *The natural history of aggression* (pp. 39-50). London: Academic Press.

Lovaglia, M., & Houser, J. (1996). Emotional reactions and status in groups. *American Sociological Review, 61*, 867-883.

Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self-reinforcing nature of power and status. *The Academy of Management Annals, 2*, 351-398.

Mehrabian, A. (1996). Pleasure-arousal-dominance: A general framework for describing and measuring individual differences in temperament. *Current Psychology, 14*, 261-292.

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.

Ray, J. J. (1981). Authoritarianism, dominance and assertiveness. *Journal of Personality Assessment, 45*, 390-397.

Ridgeway, C. L., & Correll, S. J. (2006). Consensus and the creation of status beliefs. *Social Forces, 85*, 431-453.

Russell, M., & Karol, D. (2002). *16PF Fifth Edition with updated Norms Administrator's Manual*. Champaign: Institute for Personality and Ability Testing.

Strayer, F. F., & Trudel, M. (1984). Developmental changes in the nature and function of social dominance among young children. *Ethology and Sociobiology, 5*, 279-295.

Tellegen, A. (1999). *MPQ (Multidimensional Personality Questionnaire): Manual for administration, scoring, and interpretation*. Minneapolis: University of Minnesota.

Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation, 27*, 237-246.

Chapter 5

General Discussion

Overview of the Thesis

The broad aim of this thesis was to examine individual differences relating to social status, and to create ways to measure these individual differences. To achieve this aim, we identified a number of psychological constructs relating to status and status hierarchies, and developed scales to measure individual differences in these constructs. An additional aim was to investigate the meaning of status among the general population. As developed in the Introduction, status hierarchies are ubiquitous across cultures and throughout the animal world (Adler et al., 1994; Betzig, 1993; Buss, 2008; Eibl-Eibesfeldt, 2007; Ellis, 1995; von Rueden, 2014). Furthermore, both our status and our perception of our status have significant implications for our physical and psychological well-being, and our reproductive output (Adler, et al., 1994; Buss, 2008; Gilbert, 2000; Hopcroft, 2015; von Rueden, 2014). Status hierarchies are the result of our evolved nature, and as such, we should have evolved psychological mechanisms for negotiating hierarchical life (Buss, 2008; Cummins, 2006; Zuroff, Fournier, Patall, & Leybman, 2010). Despite the universality of status hierarchies and the benefits that come with high status, we should nevertheless expect to see individual differences in our evolved psychological mechanisms related to the status domain. This is because the competition for high status is potentially costly, and not all individuals are best equipped to achieve high status (Buss, 2008). Therefore evolutionary theory predicts that not all individuals should pursue high status, and in such cases, the most adaptive response might be to accept lower status. This argument is consistent with evidence from the literature on dominance hierarchies in other animals, where ritualised behaviours allow some animals to submit to more dominant individuals before aggressive encounters escalate (Eibl-Eibesfeldt, 1970; Lorenz, 1964).

Overview of Findings

To address the broad aim of this thesis, our first study explored a range of status-relevant attitudes, beliefs, and desires. We developed a set of factors that we argued are important to life in hierarchies and that might have implications for how well individuals manage within hierarchies. Using a large sample of over a thousand participants, our analysis revealed eight meaningful factors in our proposed items: *rejection of status, high-perceived status, respect for hierarchy, low-perceived status, status display, egalitarianism, belief in hierarchy,* and *enjoyment of status.* This newly-developed 40-item "Status Consciousness Scale" was then subjected to preliminary validation, by examining how the scale facets correlated with self-esteem (Rosenberg, 1965), social dominance orientation (Pratto, Sidanius, Stallworth, & Malle, 1994), competitiveness (Houston, Harris, McIntire, & Francis, 2002), assertiveness (Goldberg et al., 2006), social comparison orientation (Gibbons & Buunk, 1999), overt narcissism (Raskin & Terry, 1988), and covert narcissism (Hendin & Cheek, 1997). The correlations between these measures and the scale factors supported the convergent validity of the scale. Furthermore, we found that men scored higher than women on the *high-perceived status, belief in hierarchy*, and *enjoyment of status* subscales, and lower than women on *egalitarianism.* This is in line with predictions from evolutionary theory that men should be more status-oriented than women (Buss, 2008; Cummins, 2006). Thus our first study successfully identified a number of status-relevant variables that individuals differ on, and developed the Status Consciousness Scale to measure them.

After this broad exploration of status consciousness, the next study focussed on the desire for status, since this particular construct was argued to be particularly central as a status-relevant evolved psychological mechanism. Some have argued that the desire for status is a fundamental and universal human motive (Anderson, Hildreth, & Howland, 2015; Buss, 2008). The desire for status is important in evolutionary terms, since high status has survival and reproductive benefits (Adler, et al., 1994; Buss, 2008; Gilbert, 2000; Hopcroft,

2015; von Rueden, 2014). We proposed that humans should have an evolved psychological mechanism to desire status, however we also argued on the basis of evolutionary theory that we should expect individual differences in the desire for status. As argued above, individuals who are not likely to succeed in the pursuit of status would be best adapted by lowering their desire for status, rather than incurring costs through this pursuit (Buss, 2008). Therefore we developed the Desire for Status Scale to measure these individual differences, and also included a measure of perceived superiority in this scale. Results in this study revealed a range of scores on the desire for status, confirming the existence of individual differences in this desire. To examine the convergent validity of the scale, we administered the Desire for Status Scale along with measures of striving to avoid inferiority (Gilbert et al., 2007), assertiveness (Goldberg et al., 2006), dominance and prestige (Cheng, Tracy, & Henrich, 2010), social dominance orientation (Pratto, et al., 1994), competitiveness (Houston, et al., 2002), social comparison orientation (Gibbons & Buunk, 1999), overt narcissism (Raskin & Terry, 1988), covert narcissism (Hendin & Cheek, 1997), and self-esteem (Rosenberg, 1965). Our subscales correlated with these existing measures mostly as predicted, which supported the convergent validity of the scale. We also found gender differences on the scale, with men scoring higher on both *desire for status* and *perceived superiority.* This is in line with findings from Chapter 2 and with predictions from evolutionary theory that men should be more driven to pursue status than women since high-status is likely to greatly enhance reproductive output for men (Buss, 2008; Cummins, 2006; Fletcher, Tither, O'Laughlin, Friesen, & Overall, 2004; Li, Bailey, Kenrick, & Linsenmeier, 2002; Li & Kenrick, 2006, Li, et al., 2013). These findings also supported the discriminant validity of the scale. We also confirmed a further prediction made using life history theory (Chisholm et al., 1993; Kaplan & Gangestad, 2005), with *desire for status* correlating negatively with age. This supports the prediction that the desire for status should be greater among younger adults, since mating and

reproduction are greater priorities during earlier adulthood, and therefore gaining status at this age is more beneficial than later in life.

In order to further examine issues surrounding the validity of Desire for Status Scale, we examined the understanding of status in the general population, since this term was used in some of the items in the scale. The Status Consciousness Scale also used a broad conceptualisation of status, in that the items did not specify any particular type of status such as prestige or dominance. This investigation of the meaning of status was partly prompted by recent developments in the psychological literature regarding the definition of the term. As some authors have pointed out, the definition of status has lacked clarity in the literature (Blader & Chen, 2014), and the term has often been used interchangeably with prestige, dominance, and power (Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013). In order to examine the validity of using the term "status" with the intention of measuring a broad construct, we conducted a qualitative study to examine how laypeople understand the term. When participants were asked what status means to them, the theme of being highly regarded, which is akin to prestige, was the most common answer. In fact, this theme arose quite commonly in several of the questions in our study. This suggests that prestige is a common understanding of status among laypeople, in line with the literature that defines status in this way (Anderson, et al., 2015; Anderson & Kilduff, 2009; Benoit-Smullyan, 1944; Blader & Chen, 2012, 2014; Fast, Halevy, & Galinsky, 2012; Fiske, 2010; Fragale, Overbeck, & Neale, 2011; Hays, 2013; Keltner, Gruenfeld, & Anderson, 2003; Lovaglia & Houser, 1996; Magee & Galinsky, 2008; Ridgeway & Correll, 2006). However, there were many more common themes among participant responses, such as power/influence, material benefits, and social benefits. Furthermore, participants often gave answers across multiple categories, suggesting that multiple definitions of status often co-occur laypeople's minds, and that these variations are not merely a case of different people defining the term differently. Thus this study showed that there are many forms of status in laypeople's minds, and that the understanding

of "status" is multi-faceted and broad. Importantly, this study also gave us insight into the lived experience of status in the minds of everyday people.

Synthesis of Studies

Firstly, the findings from the qualitative study told us something valuable about the meaning of status, which is relevant to the conceptualisation of status that we developed in the Introduction and used in the development of our scales. In the Introduction we argued that there are many different forms of status in human societies, and that the nature of status differs across cultures and across time, and that even within societies there are many forms of status (Boehm, 1999; De Botton, 2005; Eibl-Eibesfeldt, 2007; von Rueden, 2014). While status in other animals typically involves dominance (Eibl-Eibesfeldt, 1970; Lorenz, 1964), in humans, status also takes the form of prestige, which can be gained in many ways (Barkow, 1989; Cheng, et al., 2013; Henrich & Gil-White, 2001). For this reason, we argued that evolution should endow us with evolved psychological mechanisms that process status in any form that it takes. More specifically, we argued on the basis of theory that we should have an evolved psychological mechanism that drives us to desire status in any form an individual can obtain, since there are many forms of status among humans. This was the rationale for keeping the term "status" broad in the development of our scales. Our qualitative study confirmed that laypeople do understand status as being multi-faceted and occurring in many different forms, so our argument for a broad conceptualisation of status was supported. This also supports the case to use "status" as a broad term in the psychological literature, and that there are many different kinds of status.

Secondly, the qualitative study also informed us about individual differences in the desire for status. The second chapter established that there are individual differences in the desire for status, with our sample of participants showing a range of scores on the Desire for Status Scale. We argued that these individual differences exist because, on the one hand, people should desire high status because it has benefits. One the other hand, some people

should accept lower status if they are unlikely to attain high status, or if the competition for status is too costly for them. This is in line with the animal literature we discussed in the Introduction, where animals decide whether or not to fight for dominance depending on their assessment of their competitor's fighting ability relative to their own (Parker, 1974). The qualitative study demonstrated that people do indeed recognise both the costs and benefits associated with both high and low status, since they were able to identify advantages and disadvantages of high and low status. The recognition of the advantages of high status and the disadvantages of low status might be why some individuals desire high status. However, our study showed that people also recognise of the advantages of low status and the disadvantages of high status. High status, despite its benefits, can be demanding, particularly for individuals who might not be capable of competing for high status or coping with the demands of high status. These potential costs of high status might be the reasons why some people might not want to pursue high status, and prefer to accept lower status. This provides some preliminary evidence for the evolutionary explanation of individual differences in the desire for status presented in the Introduction.

Limitations and Future Research

The preliminary validation of the Status Consciousness Scale suggested that the scale has good convergent and discriminant validity, however, further validation of the construct validity of the scale is needed. In order to further validate the scale, it could be applied in studies on status, where perhaps the scale factors might predict behaviour in status hierarchies, professional and career outcomes, or other outcomes, such as psychological well-being. Furthermore, while the Status Consciousness Scale identified and measured a broad range of novel constructs relevant to status, there are probably many more status-relevant evolved psychological mechanisms yet to be identified. While we argued that the factors that we proposed had consequences for how well individuals negotiate hierarchical life, we did not address all possible adaptive problems relevant to negotiating status hierarchies. Future

research could use evolutionary theory and the existing literature on status to systematically identify a range of adaptive problems related to status, and develop scales based on those problems. Evolutionary theory would predict that there are many of these evolved psychological mechanisms related to the status domain, such as those relating to pursuing rank, protecting rank from challengers, preventing others from obtaining status, and even those for appeasement of higher-ranking individuals (Buss, 2008; Cummins, 2006; Zuroff, et al., 2010). Depending on one's circumstances and natural endowments, how individuals pursue status should differ, so there could also be mechanisms geared towards selecting strategies for obtaining rank (Zuroff, et al., 2010). A future scale could measure various components of status more fully, including these behavioural components, as well as measuring affective components surrounding feelings about hierarchies and one's own status. Attitudes about the nature of status hierarchies and beliefs about them could also be included in this comprehensive measure.

The Desire for Status Scale was designed to be a short scale for measuring the broad construct of the desire for status, since we wanted a scale that was not specific to any particular type of status. Such a short scale can be used for studies that require a measure of the desire for status without being limited to any particular type of status such as dominance or prestige. This might be useful in studies that require a measure of the desire for status that can be used across multiple contexts or conditions. Much like the Status Consciousness Scale, the preliminary indication of the convergent and discriminant validity of the Desire for Status Scale is good, but further exploration of the construct validity of the scale is needed. However, the scale was limited in terms of the selection of items – a greater range of items could be developed to explore the desire for status in more depth. Future research could also explore not just how much people desire high status, but how much people actively strive for status, given that the desire for status and how much individuals act on this desire to pursue status are two different things.

The finding from the qualitative study that the understanding of status is broad and multi-faceted has implications for the scales that were developed in the first two studies. This is particularly true for the Desire for Status Scale, since some of the items in this scale used the term "status", although the Status Consciousness Scale also referred to general concepts of hierarchy and rank. While we might be correct in concluding that status is a broad and multi-faceted construct, because of this very fact, when we use the term "status" in the Desire for Status Scale we do not know exactly how participants are interpreting it. Since we observe a broad range of conceptualisations of status, we do not know whether participants are thinking of status broadly as we intended, or thinking of a specific type of status. For example, one participant may be thinking of status as prestige and another may be thinking of status as material wealth. While it might be true that humans evolved the potential to desire status in any form, a scale that measures the desire for status should probably specify the different types of status, particularly because this is likely to differ between individuals. Future extensions of the present research could consequently develop a desire for status scale that includes different characteristics of status: for example, prestige, power, dominance, material wealth, social benefits, various personal benefits, and so on. Currently there is no existing scale that measures the desire for different types of status.

As discussed earlier, the qualitative study revealed that people recognise both the costs and benefits of high and low status. This gives some support for why there might be individual differences in the desire for status. However, despite having asked participants in this study why they might want high status, we did not measure their desire for status, nor did we directly ask participants whether the disadvantages of high status and the advantages of low status are the reasons why they might not desire high status. Therefore, we only know what people think are the advantages and disadvantages of high and low status, not how much these participants desire status, or their reasons for wanting or not wanting high status. Thus while our findings are suggestive of an explanation for individual differences, we do not yet

have a direct explanation of these individual differences. Future research should measure the desire for status, and explore *why* particular individuals desire it or do not desire it by asking them directly for their reasons. Given that the top two categories of response in our qualitative study for why individuals said they would like high status involved benefitting oneself and benefitting others, measuring how individuals who gave each type of response score on the desire for status would be an interesting question for future research. Future research could also investigate whether the people who are low on the desire for status do not desire it specifically because of particular costs associated with having high status or competing for high status. Or, individuals might not desire high status because they feel like they cannot attain it, perhaps because they have been unsuccessful in the pursuit of status in the past. This would be a more direct test of our explanation for individual differences in the desire for status. This research could also investigate how the people who desire high status feel about the costs of high status, and how the people who do not want high status feel about not having the benefits of high status.

Essentially, we have argued that evolution should have endowed humans with a universal capacity to desire status, but that we have also evolved the adaptation to lower our desire for status if our individual circumstances are not conducive to gaining status. Given that we predicted that this could explain individual differences in the desire for status, future research could explore these predictions experimentally. For example, if individuals were placed in a circumstance where they were readily able to gain high status, would they desire that status and accept the high status position? Conversely, if participants were placed in a circumstance where status is difficult to acquire or their status has been threatened, might they report a lower desire for status? Such a study might show whether people adjust their desire for status according to their assessment of whether they think high status is attainable for them, which might support our explanation of individual differences in the desire for status.

As well as examining these possibilities experimentally, cross-sectional research could also examine how life history variables predict the desire for status and other attitudes surrounding status. For example, environmental characteristics such as childhood socioeconomic status could be examined as potential predictors for status-relevant desires, attitudes, and beliefs. Conversely, these status-relevant desires, attitudes, and beliefs could be examined as predictors for other variables, such as reproductive strategies. Perhaps a high desire for status might predict a desire for more sexual partners among men, particularly since evolutionary theory predicts that having a greater number of sexual partners is a consequence of having high status in men (Buss, 2008).

Another limitation of the Desire for Status Scale is that the items only ask about the desire for high status, as opposed to asking about a general concern with status. Therefore the scale tells us that not everybody wants high status, but it does not tell us how much people care about status in general, or how they feel about having medium or low status. People who score low on the Desire for Status Scale might not want high status, but they might still be unhappy about having low status. Perhaps these individuals are happy being equal to others, or at least ranking above some individuals. Low status might be similarly undesirable for individuals who score both high and low on the desire for high status, so the lack of desire for high status is not necessarily a lack of concern for status, and might still be associated with a strong objection to having low status. It is perhaps in this sense that the desire for status is universal, as some have argued (Anderson, et al., 2015), while the strength of the desire for high status varies between individuals. Future research could examine desires and attitudes along this continuum of low, medium, and high status. An experimental study could manipulate participants' status into low, medium, and high in a scenario or situation, and examine their reactions. Scores on the Desire for Status Scale can be included as a variable to test whether those within each condition react differently depending on their scores on the scale. Presumably individuals who score high on the scale would be happier about being in a

high status position, and unhappier about being in a low status position. If the scale measures a general concern with high status, then low-scorers should not differ too much in their reactions to being put in a high or low status condition. However if the scale only measures the desire for high status in particular, rather than the general concern with status, then perhaps those who score low on the scale would be just as unhappy about having low status as those who score high.

Another interesting prospect for future research is the examination of cultural differences. The current studies only used samples from Western cultures, and the findings cannot be generalised beyond these cultures. While status hierarchies are found throughout the world, the nature of status and attitudes towards hierarchy are different all around the world. Therefore we would expect differences across cultures when we measure individual differences in the desire for status, the understanding of status, and how people behave in relation to status hierarchies. Such research would serve to further validate these individual difference measures, particularly since they might demonstrate how different environmental and societal characteristics influence these variables. Cultural differences in the desire for status have already been found (Huberman, Loch, & Onculer, 2004), and it is also known that collectivist cultures place more value on hierarchy (Smith & Schwartz, 1997). Therefore, a cross-cultural qualitative study examining in the understanding of status would also be valuable.

Gender differences could also be further explored in relation to status consciousness. For example, future research could investigate not only gender differences in the strength of status-relevant desires, beliefs, and attitudes, but also the different types of status that men and women might prefer. Previous research has found that men prefer power and women prefer status in the form of prestige (Hays, 2013), and these differences could be examined in more depth.

Implications

The first study found individual differences in various facets of status consciousness, suggesting that there are differences in the way that people relate to status, which would have implications for how they negotiate a hierarchical world. The second study found individual differences in the desire for status, which has implications for how much people pursue status, and potentially whether or not they achieve high status. Furthermore, while some authors have argued that the desire for status, at least in some form, is universal (Anderson, et al., 2015; Buss, 2008), this study has shown that individual differences in the desire for status nevertheless exist. We argued that the existence of individual differences in the desire for status are consistent with evolutionary theory, since we should expect differences in this desire depending on a range of circumstances. The final study found that in the general population, the understanding of status is broad and multi-faceted, contrary to the trend in social psychology to equate status with prestige. This has implications for how we might define status in psychology, and might also help us to integrate the various conceptualisations of status from various fields, such as anthropology and ethology. Overall, our research has demonstrated the importance of status in human life, as well as important individual differences surrounding the issue. Given our evolutionary argument for the biological basis of status-relevant psychological mechanisms, there is a scope for not only emotional and behavioural investigations of these characteristics, but also neurological studies.

Conclusions

These studies have made an original contribution to the literature, first of all by being the first to develop a broad scale measuring various facets of Status Consciousness. The existing scale has the potential to be applied in future studies to further explore the nature of the facets. However the scale could also be seen as a starting point for developing a more systematic scale of individual differences relating to status from an evolutionary perspective. The Desire for Status Scale is also the first of its kind, and is a short scale that could be useful

for researchers requiring a scale measuring the desire for status in a broad sense. Our final qualitative study demonstrated laypeople's experiential understanding of status. Importantly, the study showed that laypeople interpret the term "status" in a variety of ways, and that status is a broad and multi-faceted construct, that comes in various forms.

References

Adler, N. E., Boyce, T., Chesney, M. A., Cohen, S., Folkman, S., Kahn, R. L., & Syme, S. L. (1994). Socioeconomic status and health: The challenge of the gradient. *American Psychologist, 49*, 15-24.

Anderson, C., Hildreth, J. A. D., & Howland, L. (2015). Is the desire for status a fundamental human motive? A review of the empirical literature. *Psychological Bulletin, 141*, 574-601.

Anderson, C., & Kilduff, G. J. (2009). The pursuit of status in social groups. *Current Directions in Psychological Science, 18*, 295-298.

Barkow, J. H. (1989). *Darwin, sex, and status: Biological approaches to mind and culture.* Toronto: University of Toronto Press.

Benoit-Smullyan, E. (1944). Status, status types, and status interrelations. *American Sociological Review, 9*, 151-161.

Betzig, L. (1993). Sex, succession, and stratification in the first six civilizations: How powerful men reproduced, passed power on to their sons, and used power to defend their wealth, women, and children. In L. Ellis (Ed.), *Social stratification and socioeconomic inequality: A comparative biosocial analysis* (Vol. 1, pp. 37-74). Westport: Praeger Publishers/Greenwood Publishing Group.

Blader, S. L., & Chen, Y. R. (2012). Differentiating the effects of status and power: A justice perspective. *Journal of Personality and Social Psychology, 102*, 994.

Blader, S. L., & Chen, Y. R. (2014). What's in a name? Status, power, and other forms of social hierarchy. In J. T. Cheng, J. L. Tracy & C. Anderson (Eds.), *The psychology of social status* (pp. 71-95). New York: Springer.

Boehm, C. (1999). *Hierarchy in the forest: The evolution of egalitarian behavior.* Cambridge: Harvard University Press.

Buss, D. M. (2008). *Evolutionary psychology: The new science of the mind* (3rd ed.). Boston: Pearson/Allyn and Bacon Publishers.

Cheng, J. T., Tracy, J. L., Foulsham, T., Kingstone, A., & Henrich, J. (2013). Two ways to the top: Evidence that dominance and prestige are distinct yet viable avenues to social rank and influence. *Journal of Personality and Social Psychology, 104*, 103-125.

Cheng, J. T., Tracy, J. L., & Henrich, J. (2010). Pride, personality, and the evolutionary foundations of human social status. *Evolution and Human Behavior, 31*, 334-347.

Chisholm, J. S., Ellison, P. T., Evans, J., Lee, P., Lieberman, L. S., Pavlik, Z., . . . Worthman, C. M. (1993). Death, hope, and sex: Life-history theory and the development of reproductive strategies. *Current Anthropology, 34*, 1-24.

Cummins, D. D. (2006). Dominance, status, and social hierarchies. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 676-697). Hoboken, NJ: Wiley.

De Botton, A. (2005). *Status anxiety*. New York: Vintage.

Eibl-Eibesfeldt, I. (1970). *Ethology: The biology of behavior*. New York: Holt, Rinehart and Winston.

Eibl-Eibesfeldt, I. (2007). *Human ethology*. New York: Transaction Publishers.

Ellis, L. (1995). Dominance and reproductive success among nonhuman animals: A cross-species comparison. *Ethology and Sociobiology, 16*, 257-333.

Fast, N. J., Halevy, N., & Galinsky, A. D. (2012). The destructive nature of power without status. *Journal of Experimental Social Psychology, 48*, 391-394.

Fiske, S. T. (2010). Interpersonal stratification: Status, power, and subordination. In S. Fiske, D. T. Gilbert & G. Lindzey (Eds.), *Handbook of Social Psychology* (5th ed., pp. 941-982). New York: John Wiley & Sons, Inc.

Fletcher, G. J., Tither, J. M., O'Loughlin, C., Friesen, M., & Overall, N. (2004). Warm and homely or cold and beautiful? Sex differences in trading off traits in mate selection. *Personality and Social Psychology Bulletin, 30*, 659-672.

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.

Gibbons, F. X., & Buunk, B. P. (1999). Individual differences in social comparison: Development of a scale of social comparison orientation. *Journal of Personality and Social Psychology, 76*, 129-142.

Gilbert, P. (2000). The relationship of shame, social anxiety and depression: The role of the evaluation of social rank. *Clinical Psychology and Psychotherapy, 7*, 174-189.

Gilbert, P., Broomhead, C., Irons, C., McEwan, K., Bellew, R., Mills, A., . . . Knibb, R. (2007). Development of a striving to avoid inferiority scale. *British Journal of Social Psychology, 46*, 633-648.

Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. G. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality, 40*, 84-96.

Hays, N. A. (2013). Fear and loving in social hierarchy: Sex differences in preferences for power versus status. *Journal of Experimental Social Psychology, 49*, 1130-1136.

Hendin, H. M., & Cheek, J. M. (1997). Assessing hypersensitive narcissism: A reexamination of Murray's Narcism Scale. *Journal of Research in Personality, 31*, 588-599.

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.

Hopcroft, R. L. (2015). Sex differences in the relationship between status and number of offspring in the contemporary U.S. *Evolution and Human Behavior, 36*, 146-151.

Houston, J., Harris, P., McIntire, S., & Francis, D. (2002). Revising the Competitiveness Index using factor analysis. *Psychological Reports, 90*, 31-34.

Huberman, B. A., Loch, C. H., & Onculer, A. (2004). Status as a valued resource. *Social Psychology Quarterly, 67*, 103-114.

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review, 110*, 265-284.

Li, N. P., Bailey, J. M., Kenrick, D. T., & Linsenmeier, J. A. (2002). The necessities and luxuries of mate preferences: Testing the tradeoffs. *Journal of Personality and Social Psychology, 82*, 947-955.

Li, N. P., & Kenrick, D. T. (2006). Sex similarities and differences in preferences for short-term mates: What, whether, and why. *Journal of Personality and Social Psychology, 90*, 468-489.

Li, N. P., Yong, J. C., Tov, W., Sng, O., Fletcher, G. J., Valentine, K. A., . . . Balliet, D. (2013). Mate preferences do predict attraction and choices in the early stages of mate selection. *Journal of Personality and Social Psychology, 105*, 757-776.

Lorenz, K. (1964). Ritualized fighting. In J. D. Carthy & F. J. Ebling (Eds.), *The natural history of aggression* (pp. 39-50). London: Academic Press.

Lovaglia, M., & Houser, J. (1996). Emotional reactions and status in groups. *American Sociological Review, 61*, 867-883.

Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self-reinforcing nature of power and status. *The Academy of Management Annals, 2*, 351-398.

Parker, G. A. (1974). Assessment strategy and the evolution of fighting behaviour. *Journal of Theoretical Biology, 47*, 223-243.

Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social Dominance Orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*, 741-763.

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.

Ridgeway, C. L., & Correll, S. J. (2006). Consensus and the creation of status beliefs. *Social Forces, 85*, 431-453.

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

Smith, P. B., & Schwartz, S. H. (1997). Values. In J. W. Berry, M. H. Segall & C. Kagitcibasi (Eds.), *Handbook of cross-cultural psychology* (2nd ed., Vol. 3, pp. 77-118). Needham Heights: Allyn and Bacon.

von Rueden, C. (2014). The roots and fruits of social status in small-scale human societies. In J. T. Cheng, J. L. Tracy & C. Anderson (Eds.), *The psychology of social status* (pp. 179-200). New York: Springer.

Zuroff, D. C., Fournier, M. A., Patall, E. A., & Leybman, M. J. (2010). Steps toward an evolutionary personality psychology: Individual differences in the social rank domain. *Canadian Psychology, 51*, 58-66.

Appendix A: Items used in pilot research

1. I'm often aware of how I rank compared to others on different measures of success.

2. When I interact with a group of people, I pay attention to where everyone ranks in the group and what my position is.

3. If I want to judge how well I'm doing in life, I compare myself to the people around me to find out how I rank.

4. I often compare myself to other people and judge whether or not I am better than them.

5. I can see how some people are better than others.

6. When someone else does well, I can always think of a way in which I'm better than them.

7. When somebody has a go at me, I put them back in their place.

8. If someone threatens my status in a social group, I do what I can to defend my place.

9. When I meet someone I notice the ways in which I'm better than them.

10. When I compare my accomplishments with those of others, I think mine rate pretty highly.

11. When I compare myself to my peers, I sometimes feel sorry for them.

12. When I'm with a group of people I usually feel like I'm one of the better ones in the group.

13. I often feel as though others are beneath me.

14. It feels good when other people are in awe of me.

15. I would love to be at the top of the social ladder.

16. When I succeed at something, I like to tell people about it.

17. I sometimes fantasise about the admiration I will receive when I succeed in my goals.

18. I enjoy being the object of people's envy.

19. I like to make friends with the people at the top.

20. Even if people deny it, everyone is in competition with one another.

21. Given the opportunity, most people would want to be at the top.

22. People judge how good you are based on how successful you are.

23. The more successful you are, the more people respect you.

24. If you don't have respect, you don't have power.

25. Being human means having to prove that you are successful in as many things as possible.

26. If you aren't at the top, you are nothing.

27. The social world is a hierarchy where everyone is ranked by how good they are.

28. The most accomplished people occupy the best place in social groups.

29. To be treated well by others, you need to be desirable.

30. Your place in the world is determined by how much others look up to you.

31. Not being respected is a form of social death.

32. It's not enough that people like you – they have to respect you too.

33. I worry that I don't rank high enough on the social ladder.

34. I think most people are quite concerned about their social status.

35. I tend to notice when people are trying to climb the social ladder.

36. I'm not the sort of person who thinks that social status matters in life.

37. I have no real desire to be around the top of the social hierarchy.

38. Doing better than others is not what is important in life.

39. I don't need to be better than others to feel successful.

40. It doesn't really matter how you compare to others.

41. It doesn't bother me if somebody thinks they are superior to me.

42. I don't feel particularly threatened by people who try to dominate me.

43. When I achieve something, I tend to keep quiet about it.

44. I feel uncomfortable when others are submissive to me.

45. I don't like people thinking that I'm better than them.

46. I prefer it if everybody is equal.

47. Everyone has something valuable to offer.

48. I'm more interested in getting along with others than competing with them.

49. When you succeed people have a way of making you pay.

50. When I compare my life to others peoples' lives, I sometimes feel like a loser.

Appendix B: Initial item pool for the Status Consciousness Scale

Awareness of hierarchy

1. Being human means having to prove that you are successful in as many things as possible.

2. The more successful you are, the more people respect you.

3. If you aren't at the top, you are nothing.

4. The most accomplished people occupy the best place in social groups.

5. The social world is a hierarchy where everyone is ranked by how good they are.

6. Your place in the world is determined by how much others look up to you.

7. If you don't have respect, you don't have power.

8. Even if people deny it, everyone is in competition with one another.

9. Given the opportunity, most people would want to be at the top.

10. To be treated well by others, you need to be desirable.

Reverse-scored items:

11. Despite all the competitiveness in the world, most people ultimately want equality.

12. You don't need to have any special achievements to be a valuable member of a group.

13. Generally, people aren't motivated by a desire to out-do others.

14. Doing better than others doesn't earn you any special rank in the world.

15. Having a high place in the world doesn't really get you much.

16. It doesn't really make a difference in life if you stand out as better than others.

17. People generally don't spend much of their time striving for status in the world.

18. Most people would rather be liked than have high status.

19. People don't tend to care about being better than others.

20. The important things in life have nothing to do with high status.

Belief in hierarchy

1. Some people are just better than others.

2. The best people in the world are the ones that get to the top.

3. The world is never going to be equal because some people will always do better than others.

4. There's nothing wrong with the fact that some people are better off than others.

5. It's only natural that some people get ahead of others in life.

6. If somebody gets to the top it's because they have earned it.

7. The best people belong at the top.

8. It makes sense that the best people get the best in life.

9. We don't need to try to make the world a more equal place.

10. It's natural for people to want to be better than others.

Reverse-scored items:

11. I prefer it if everybody is equal.

12. I'm more interested in getting along with others than competing with them.

13. I don't need to be better than others to feel good about myself.

14. Doing better than others is not what is important in life.

15. It doesn't really matter how you compare to others.

16. I wish there was true equality in the world.

17. It's no big deal if someone seems better than you.

18. Having high social status in the world doesn't necessarily make you a better person.

19. Everyone should be striving to make the world a more equal place.

20. People who have more in life should sacrifice some of what they have to improve the lives of people who have less.

Perceived status

1. When I meet someone I notice the ways in which I'm better than them.

2. I often feel as though others are beneath me.

3. When I compare myself to other people, I sometimes feel sorry for them.

4. When I'm with a group of people I usually feel like I'm one of the better ones in the group.

5. When someone else does well, I can always think of a way in which I'm better than them.

6. When I compare my accomplishments with those of others, I think mine rate pretty highly.

7. I can always find some way in which I'm better than any other person I know.

8. Compared to most people I know, I'm doing pretty well in life.

9. I can see why people would be envious of me.

10. I'm the sort of person who usually sits at the top of the hierarchy in the social world.

Reverse-scored items:

11. When I compare my life to others peoples' lives, I sometimes feel like a loser.

12. I don't think I rank very high in the world.

13. I often feel like other people are better than me.

14. I'm nothing special compared to everyone else.

15. I struggle to find anything that I'm the best at.

16. I'm the sort of person that tends to blend in with a group.

17. I don't think I've ever achieved anything particularly extraordinary.

18. I don't see myself as better than anyone else.

19. I've never really felt like I was superior to anyone.

20. There is nothing about me that makes me stand out above others.

Status anxiety

1. I worry that I don't rank high enough on the social ladder.

2. If I want to judge how well I'm doing in life, I compare myself to the people around me to find out how I rank.

3. I often compare myself to other people to see if I'm doing well enough.

4. If somebody tries to bring me down, I do what I can to defend myself.

5. I'm very conscious of where I stand in the social order.

6. To improve my place in the world I need to out-do others.

7. People often want to compete with you for a better place in the world

8. I'm often concerned that something may happen to make me lose status in the social world.

9. If I don't make something out of myself it's my own fault.

10. I pay attention to where everyone ranks in a group and what my position is.

Reverse-scored items:

11. I'm not particularly worried about not doing well enough.

12. I don't need to climb the social ladder to feel like I'm a person of worth.

13. I'm not the sort of person who worries about how I compare to others.

14. I don't get anxious about my place in the world.

15. I'm not worried about whether or not I'm keeping up with others.

16. It doesn't worry me if I don't get ahead of others.

17. I don't feel like I need to prove myself to anyone.

18. If other people don't see me as something special, it's no big deal.

19. I don't need to be more successful than others to feel good about myself.

20. I don't spend much time thinking about whether I'm good enough compared to others.

Status drive

1. I would love to be at the top of the social ladder.

2. I like to make friends with the people at the top.

3. I can't stand people who seem to be better than me.

4. It really bothers me if somebody thinks they are superior to me.

5. I want to be the best in life because that's how you know you've made it.

6. I'm always trying to find ways to improve my status in life.

7. I'm aiming to get to the top.

8. It's important to me to have a high place in the world.

9. A lot of the things I do in life are about getting ahead.

10. Life is all about being successful at whatever you do.

Reverse-scored items:

11. I have no real desire to be around the top of the social hierarchy.

12. Having high social status doesn't really matter to me.

13. I don't try to be better than other people.

14. I'm not motivated by a desire to get ahead.

15. I don't get any enjoyment out of competing with others to be better.

16. It doesn't matter to me where I stand in the social order.

17. There's no real value to me in being better than others.

18. I've never been the sort of person who needs to climb any social hierarchies.

19. I'm perfectly happy to be an average person.

20. I would gladly give up a high ranking place to someone else.

Status display

1. When I succeed at something, I like to tell people about it.

2. There's nothing wrong with showing off your talents.

3. I like people to see that I'm something special.

4. I like to impress the people above me.

5. People are usually impressed when I tell them about my accomplishments.

6. I enjoy getting something new and showing all my friends.

7. Having expensive things is a sign of your success.

8. I like telling other people about my achievements.

9. I like telling other people when something good happens to me.

10. I like to share what I know with other people.

Reverse-scored items:

11. When I achieve something, I tend to keep quiet about it.

12. I feel uncomfortable with showing off.

13. I don't really like to make a big deal about myself.

14. I don't need to go telling everyone when something good happens to me.

15. I not the sort of person who feels the need to put my life on display.

16. I have never used my success or my talents as a way of making myself look better than others.

17. I don't think that having expensive things is much good for impressing others.

18. I'm pretty modest about my achievements.

19. I don't really talk about myself much.

20. I not interested in trying to impress people.

Enjoyment of status

1. It feels good when other people are in awe of me.

2. Given the opportunity, most people would want to be at the top.

3. I sometimes fantasise about the admiration I will receive when I succeed in my goals.

4. I enjoy being the object of people's envy.

5. I like it when others are submissive to me.

6. I like the idea of being an important person.

7. It feels nice to be envied.

8. I get a rush out of feeling other people's admiration.

9. I really relish being the best.

10. I think I would really enjoy all the respect you get when you're at the top.

Reverse-scored items:

11. I don't get any joy from having people look up to me.

12. I'm not the sort of person who gets any thrill out of having others defer to me.

13. I can't see why anyone would enjoy being superior to others.

14. I would feel uncomfortable being ranked above others.

15. I wouldn't want anyone to think that I'm better than them.

16. I don't find the idea of being a high status person appealing.

17. I don't spend much time fantasising about success.

18. I prefer to be on the same level as everybody else.

19. I like to blend in with everyone else.

20. I don't mind having a humble place in a group.

Respect for hierarchy

1. I respect the people above me in a social hierarchy.

2. I do what is expected of me by those with a higher authority.

3. Everybody should respect their superiors.

4. The people who rank above you in a hierarchy should be treated in a way that is appropriate to their higher position.

5. I look up to people of higher status than me.

6. I expect the people who rank below me in a hierarchy to respect me.

7. When I am in a position of authority, I expect people to treat me accordingly.

8. Those who rank lower in a hierarchy should behave in a way that is appropriate to their position.

9. Insubordination should not be tolerated by anyone.

10. The people lower than me in a hierarchy can expect that I will treat them as such.

Reverse-scored items:

11. I don't treat the people who rank above me in any special way.

12. People who rank highly in a hierarchy don't deserve any special treatment.

13. There is no obligation to treat those who rank higher than you as superior.

14. Just because somebody ranks above you, it doesn't mean you owe them extra respect.

15. I don't tend to be highly obedient to the people who rank above me.

16. I don't see the people beneath me in a social hierarchy as any lower than me.

17. I'm not the sort of person who looks down on the people I rank above.

18. I don't expect special treatment from those who rank below me.

19. People who have a lower rank in a hierarchy don't need to give favourable treatment to the people who rank above them.

20. A person with a low rank shouldn't have to behave in a submissive way.

Appendix C: Initial item pool for the Desire for Status Scale

Desire for status:

1. I would love to be at the top of the social ladder.

2. It's important to me to have a high place in the world.

3. Being more successful than other people makes me feel good about myself.

4. I worry about whether I'm doing well enough in life.

5. I find the idea of being a high status person very appealing.

6. I do my best to stand out as better than others.

Reverse-scored items:

7. It doesn't matter to me where I stand in the social order.

8. Having high social status doesn't really matter to me.

9. I don't spend much time thinking about whether or not I'm better than other people.

10. It doesn't worry me if I don't get ahead of others.

11. If other people don't see me as something special, it's no big deal.

12. I'm not the sort of person who needs to climb to the top of any social hierarchies.

Perceived superiority:

1. When someone else does well, I can always think of a way in which I'm better than them.

2. I often feel as though others are beneath me.

3. The people lower than me in a hierarchy can expect that I will treat them as such.

4. I can always find some way in which I'm better than any other person I know.

5. If you aren't at the top, you are nothing.

6. When I'm with a group of people I usually feel like I'm one of the better ones in the group.

Reverse-scored items:

7. Having high social status in the world doesn't necessarily make you a better person.

8. I don't see any other people as inferior to me.

9. I don't think I'm any better than anyone else.

10. I'm not the sort of person who sees myself as superior to others.

11. I don't usually see myself as being at the top of any social hierarchies.

12. I can think of several people I know who I believe are better than me.

Appendix D: Full results for qualitative study

Table 1

Responses to the question "Having "high status" to me means:" (n = 115)

Category	Examples	Freq.	% of total
Highly regarded	Respect	31	
	Importance	7	
	Highly/well-regarded	6	
	Recognition	6	
	Prestige	5	
	Valued	4	
	Above normal/others	3	
	Admiration	2	
	Esteem	2	
	Inspire others	2	
	Looked up to	2	
	Role model	2	
	Other: appreciated, elite group member, impressing others, looked to for guidance, renown, sought for direction/advice, superiority	7	
	Total:	79	25.3%
Material benefit	Money/wealth/finances/rich	33	
	Property/resources/possessions	7	

	Other: living in certain areas of cities	1	
	Total:	41	13.1%
Means of attaining status	Job/career/profession	10	
	Reputation/impression on others/how seen	4	
	Class	3	
	Education	3	
	Family or spouse's status	3	
	Conferred by others	2	
	Contribution to society	2	
	Socio-economic status	2	
	Other: depends on group or culture, doing extraordinary work, earned, having what Western society values, involvement in community, peer group membership, service	7	
	Total:	36	11.5%
Power/influence	Power	17	
	Influence	8	
	Leadership	4	
	Authority	3	
	Other: control, demanding	2	
	Total:	34	10.9%

Social benefit	Known/seen/visibility/attention	17	
	Treated better than others/given priority	6	
	Popularity	5	
	Connections/large social circle/network	4	
	Other: fulfil potential for love, socially accepted	2	
	Total:	34	10.9%
Personal quality	Achievement	6	
	Knowledge/expertise	4	
	Skill/ability/talent	4	
	Confidence	3	
	Quality (aspect/attribute/trait of individual)	3	
	Cool/classy	2	
	Success	2	
	Other: aware of trends/fashions, eloquence, fortitude, intelligence, loud, motivated	6	
	Total:	30	9.6%
Definition of status	Rank (ladder, hierarchy, standing, position)	12	
	Social	3	

	Other: malleable, moral status means moral decisions correct, non-existent, not an indicator of wealth/intelligence/standing, not worth of a person, titles (Sir, Dame, awards), can be high and low status simultaneously	7	
	Total:	22	7.1%
Personal benefit	Privilege	3	
	Access to education	2	
	Opportunity	2	
	Other: advancement, fulfil potential for effort, freedom, government favours you, happy, healthy, safety/security, well-positioned to achieve	8	
	Total:	15	4.8%
Meaning to me	Nothing/very little	8	
	Other: a big deal, important to me, money and fame don't matter to me	3	
	Total:	11	3.5%
Miscellaneous	Arrogance/up yourself/stuck up	3	
	Responsibility	2	
	Other: complicated for people who wish to live a modest lifestyle, could be decent, infamous, coveted and envied, stressful to maintain	5	

Total:		10	3.2%
Grand total:		312	

Table 2

Responses to the question "I would like to have high status so I can:" (n = 108)

Category	Examples	Freq.	% of total
Personal benefit	Do what I want	7	
	Indulge in pleasure (do more for myself, easy life, eat, excitement, sensual pleasure, rest)	6	
	Feel good about myself (feel worthy, fulfilment, pride in myself, know that I'm doing the right thing in life, stop holding myself back with negativity)	5	
	Comfort	4	
	Opportunity/open doors	4	
	Better work/jobs	3	
	Health/medical care	3	
	Access what most can't	2	
	Quality of life/better life	2	
	Worry less	2	

	Other: be an international speaker, follow my instincts, look amazing all the time, maintain my position, no limits, safety, self-development, spend less time trying to convince others of worth, success.	9	
	Total:	47	27.5%
Help/benefit others	Help others	9	
	Influence others (positively/their benefit)	10	
	Care for family	3	
	Educate/guide/teach others	3	
	Other: advocate for others who have no voice, contribute to society, do good in the world, do more for others, encourage others, help and support people with cerebral aneurysms, impact climate policy, make the world a better place, obtain funds to cure diseases and feed the hungry, promote renewable energy.	10	
	Total:	35	20.5%
Highly regarded	Respected	14	
	Admired	3	
	Listened to	3	
	Recognition	3	
	Taken seriously	2	
	Valued	2	

	Other: believed in, credibility, do good quality work, importance, role model.	5	
	Total:	32	18.7%
Not wanted/not important	Not wanted	17	
	Other: don't want it with anyone other than friends and family, no desire for own benefit, not important (to me), not required to achieve an outcome - would only want it from having achieved something.	4	
	Total:	21	12.3%
Power/influence	Influence	7	
	Change things	4	
	Make a difference	3	
	Self-determination	2	
	Other: control over life/outcomes, delegate work, impact, lord it over people who think they're better.	4	
	Total:	20	11.7%
Material benefit	Money/paid better/rich	5	
	Financial freedom/afford things	3	
	Have things I want	1	
	Total:	9	5.3%

Social benefit	Be romantically attractive	2	
	Other: acceptance, attention, external validation, friends, make people jealous.	5	
	Total:	7	4.1%
	Grand total:	171	

Table 3

Responses to the question "The advantages of having high status include:" (n = 97)

Category	Examples	Freq.	% of total
Highly regarded	Respect	17	
	Listened to/heard	10	
	Recognition	6	
	Highly revered (idolised, looked up to, reverence, role model)	4	
	Opinions matter/accepted	3	
	Trust	3	
	Valued	3	
	Admiration	2	
	Reputation	2	
	Validation	2	
	Other: acknowledged, actions matter, affirmation, agreement, appreciation, being the best in the field, credibility, praise, regarded well, taken seriously.	10	
	Total:	62	26.5%

Personal benefit	Feeling good (confidence, emotional well-being, feel secure, feeling good, less worry, mental well-being, pride in oneself, self-esteem, self-worth)	9	
	Opportunity	7	
	Freedom	6	
	Less difficulty (easy solutions, fewer barriers, future endeavours easier, no need to wait in line, mitigating cost of mistakes, new avenues for decision-making)	6	
	Access (e.g. services, events)	5	
	Job (e.g. good job, prospects, security)	5	
	Quality of life (free time, get what you want, needs met, physical well-being, quality of life)	5	
	Open doors	4	
	Choice	2	
	Other: publicise and get funding for my research, purpose, resilience.	3	
	Total:	52	22.2%
Power/influence	Influence (neutral/unspecified)	16	
	Power	8	

	Use power for good (ability to help others, access to resources to make a difference, create a better society, educate others, encourage others to work for common good, power to do good)	6	
	Change world (neutral)	3	
	Persuasiveness	3	
	Control	2	
	Responsibility	2	
	Other: authority, challenge norms, easier to tackle things others won't get involved in, influence others for own benefit, less arguments among lower status so more productive, power to do bad, self-determination.	7	
	Total:	47	20.1%
Social benefit	Help received/favours/things done for you	8	
	Networking/connections	7	
	Acceptance	3	
	Treated well	3	
	Access to influential people	2	
	Attention	2	
	Fame/media	2	
	Friends/popularity	2	
	Known	2	

	Less judgment	2	
	Multiple sexual partners/sexually attractive	2	
	Other: approval, less betrayal, no need to please those above, not looked down on, others bend their lives around you without you realising, others more willing to get involved, prioritised, social well-being, treated differently, understood.	10	
	Total:	45	19.2%
Material benefit	Money/income/wealth/financial freedom/security	17	
	Well-paid job	2	
	Other: get free stuff, not poor, property, resources to achieve goals, travel.	5	
	Total:	24	10.3%
Miscellaneous	None /nothing	2	
	Other: not all special treatment is an advantage, possibly a bad person.	2	
	Total:	4	1.7%
	Grand total:	234	

Table 4

Responses to the question "The disadvantages of having high status include:" (n = 96)

Category	Examples	Freq.	% of total
Negativity from others	Assumptions made about you (assumed money even when not the case, assumed you have it all together, judged as extravagant, perceived misuse of power, perception that everything is handed to you, preconception, seen as snobby, seen as threat, seen as unfairly advantaged, viewed negatively as conservative/upper class)	10	
	Scrutiny	7	
	Judgment	6	
	Criticism	4	
	Jealousy	4	
	Envy	3	
	Stricter standards (doubted if you don't have the answer, mistakes judged more harshly and broadly, people finding fault with you)	3	
	Disrespect	2	
	Misunderstood by those of different status	2	
	Resented	2	
	People thinking that you think you're superior	2	

	Other: disagreed with, distrust, gossip and rumours, prejudice, reverse snobbery.	5	
	Total:	50	25.3%
Personal cost	Responsibility	11	
	Limitations (distraction from goals, inability to be perfect in an imperfect world, lack of freedom, less choice, less room for mistakes, little time on my own, sacrifice life balance, time-pressure)	8	
	Demands (busy, hard decisions, having to live up to status, potential to lose respect/status, shifting/contradictory requirements)	5	
	Emotional cost (anxiety, fear of failure, stressful, unhappiness)	4	
	Maintaining it	4	
	Pressure	4	
	Demanding	3	
	Hard work	2	
	Other: being pedantic, living superficially, living to the edge of means, materialism, might not consider themselves as well off as others.	5	
	Total:	46	23.2%

Demands from others	Expectations (high/greater)	8	
	Expectations (of you)	5	
	Sought after (looking to you for answers, pursued for opinions and advice, sought out too frequently)	3	
	Under observation (best behaviour always needed, can't get away with anything wrong, need to be cautious in public)	3	
	Attract freeloaders/hangers-on	2	
	Image maintenance	2	
	Other: have to submit to wishes of elite, heightened trust requiring more care for others, inability to please everyone and cater to all requests, need to comply with public presumptions, others try to influence you, pressure to appear rich, your life is not your own.	7	
	Total:	30	15.2%
Attention	Attention	10	
	Lack of privacy	9	
	Press/media attention	5	
	Lack of anonymity	2	
	Other: celebrity, mistakes more public, negative attention.	3	
	Total:	29	14.6%

Social isolation	Fake friends/no real friends	6	
	Isolation (from others)/loneliness	5	
	Treated differently	3	
	Other: difficulty relating to others, out of touch, rejection due to assumption that others will provide for me.	3	
	Total:	17	8.6%
Threat from others	Targeted (potential target, target for abuse, target for extortion, target for robberies)	4	
	Tall poppy syndrome	2	
	Taken advantage of	2	
	Other: being on guard, people turn against you.	2	
	Total:	10	5.1%
Miscellaneous	Corruption	3	
	None/nothing	3	
	Don't know	2	
	Goes to your head	2	
	Other: entitlement, sense of purpose, misuse of status, negatively affect others, no real criticism, notoriety.	6	
	Total:	16	8.1%
	Grand total:	198	

Table 5

Responses to the question "The advantages of having low status include:" (n = 93)

Category	Examples	Freq.	% of total
Less demand	Less expectations	15	
	Less pressure	8	
	Less hassles from others (freedom from disruption, less demands, less harassment, less intrusion into life, not hassled for advice, money and networking)	5	
	Less responsibility	5	
	Less stress	4	
	Less work needed on reputation/image	2	
	No need to keep up with others	2	
	Other: less emotional pressure, less work, no obligations, no one cares what you do, not expected to lead by example.	5	
	Total:	46	26.4%
Less attention	Anonymity	21	
	Under the radar	5	
	Invisibility	4	
	Less attention	4	
	Less noticed	3	
	Mistakes not noticed	2	

	Privacy	2	
	Other: freedom from undue attention, low profile.	2	
	Total:	43	24.7%
Easy life	Simplicity/simple life	5	
	Quiet life	3	
	Keep to yourself/mind own business	2	
	Less guilt	2	
	Other: happier, knowing that all bodies have the same capacity for contentment, low key, modesty, more accepting of how their life is, not caring what people think, peace, work/life balance better.	8	
	Total:	20	11.5%
Special benefit	Can raise status (can always go up, room to improve status, scope for aspiration)	3	
	Herd protection	2	
	Other: at ground level, benefits received because of low status, can have secret high status (the good kind), financially savvy, focus on internal influences and rewards, grounded view of the world, seen as new and exciting, teach children important things in life, understand what life is really about, unnoticed power for good, working from ground up.	11	

	Total:	16	9.2%
Freedom	Be yourself	3	
	Freedom	3	
	Live own life	3	
	Other: control over own life, ease of movement - easier to move freely in the shadows, go with the flow, more time to do what you want, pursue dreams for the sake of it.	5	
	Total:	14	8.0%
Social connection	Relate to more people	3	
	Awareness of others with similar status	2	
	Part of the crowd/same as everyone else	2	
	Other: cool factor, more awareness of social currents, people more honest and relaxed with you, secure friendships, understand what it's like.	5	
	Total:	12	6.9%
Less negativity from others	Less scrutiny	6	
	Less fear of judgment	2	
	Other: less fear of criticism, noticed more for positives than negatives.	2	
	Total:	10	5.7%

Miscellaneous	None/can't think of any	6	
	Misunderstood question - listed disadvantages	4	
	Not many advantages	2	
	Other: having an unjustifiable "schadenfreude" at world.	1	
	Total:	13	7.5%
	Grand total:	174	

Table 6

Responses to the question "The disadvantages of having low status include:" (n = 91)

Category	Examples	Freq.	% of total
Low regard	Less respect	11	
	Ignored	8	
	Not listened-to/heard	5	
	Not taken seriously	4	
	Looked down on/others think they are better than you/perceived as being of lower worth	6	
	Underestimated	2	
	Patronised/talked down to	2	
	Less attention/interest in you	2	

	Other: advice not taken, being low status, disregarded, less admiration, not as good, others assume you made bad choices, perceived differently, same as everyone else, under-rated.	9	
	Total:	49	23.7%
Powerless	Less influence	9	
	Barriers (hard to improve status, harder to achieve, harder to get issues sorted, less able to keep on top of things, limitations on what you can do, more barriers, more effort needed to be convincing, unable to advance an agenda)	8	
	Powerlessness/less power	6	
	Less control (over own life)	3	
	Marginalised/oppressed/victimised by higher status people	3	
	Less likely to get what you want/need	2	
	No voice	2	
	Other: helpless in governance of affairs, lack agency, less opportunity to change world, less representation, more susceptible to illegal activities through peer pressure, others can affect you with less consideration, visible to state, waiting.	8	
	Total:	41	19.8%

214

Material cost	Less money	15	
	Poverty	6	
	Less access to resources/services/facilities	4	
	Less able to provide for children/family	2	
	Other: bad living conditions, don't have what you need, financially disadvantaged, less rewards for achievements, lower socio-economic status, poorer material well-being.	6	
	Total:	33	15.9%
Personal cost	Less opportunity	7	
	Poor health/health care	5	
	Less education opportunity	2	
	Less occupational opportunity	2	
	Poor quality of life/life sucks	2	
	Other: lack of good role models, less freedom, less social mobility, need to work harder, neglect contentment to meet needs, poorer occupational well-being, struggle to make a living.	7	
	Total:	25	12.1%
Treated badly	Judged (negatively)	4	
	Discriminated against	2	
	Exclusion	2	
	Less acceptance/tolerance	2	

	Other: being used as 'wolf' in narrative on why to conform, belittled, expected to strive for higher status, fobbed off, lack of acknowledgment, pressure from society, pressure to improve, singled out by majority for blame, taken advantage of, treated badly, treated unfairly, under-utilised.	12	
	Total:	22	10.6%
Social cost	Anonymity/invisibility	4	
	Less friends	2	
	Less individuality	2	
	Other: lack of support, lack of validation from others, less attractive, less relational opportunity, less sexual partners, more effort needed socially, no one curries you favour, need to prove worthiness, poorer social well-being, relationship problems because you over-analyse.	10	
	Total:	18	8.7%
Emotional cost	Low self-worth	4	
	Feeling unimportant	2	

	Other: feel hopeless, feeling insecure, frustration from being considered unworthy, frustration from not being heard, lack of purpose, lack of relevance, poor emotional well-being, status anxiety, worry more over little things.	9	
	Total:	15	7.2%
Miscellaneous	Opposite of high status	3	
	None	1	
	Total:	4	1.9%
	Grand total:	207	

Table 7

Responses to the question "If I had high status I would:" (n = 89)

Category	Examples	Freq.	% of total
Help others	Help others (various/general)	23	
	Charity work	9	
	Social justice	7	
	Help friends/family/ immediate circle	5	
	Total:	44	30.1%
Change/Influence	Change/influence (good)	21	
	Change/influence (neutral)	9	

	Be heard	5	
	Total:	35	24.0%
Personal benefit	Do what I want	10	
	Opportunity	4	
	Work less/not work/work in a job I enjoy	4	
	Happiness/enjoyment	3	
	Network	2	
	Other: recruit more people to work for me, work to keep the high status, get better health care and help at home.	3	
	Total:	26	17.8%
No different	No different	8	
	Live modestly	2	
	Other: I already do but it doesn't mean much, live reclusively, still be humble, Still be respectful to those of lower status, try to be friendly and down to earth	5	
	Total:	15	10.3%
Material benefit	Have more money	3	
	Not have debt	2	

	Other: enjoy what I want with no financial pressure, fly first class, would like shopping for high status items to maintain appearances	3	
	Total:	8	5.5%
Miscellaneous	I don't know	3	
	Do the best I could	2	
	Other: change, hard to imagine, I don't want it, live mindfully, not applicable, probably always be looking over my shoulder, probably devolve into a narcissistic mess, status depends on how people perceive you, try to make the best of it while it was forced on me, use it wisely - like Batman, weary of using status to influence on some issues and using anything other than reasoning, would not do well with high status, would probably abuse it	13	
	Total:	18	12.3%
	Grand total:	146	

Table 8

Responses to the question "If I had high status other people would:" (n = 87)

Category	Examples	Freq.	% of total
Highly regarded	Listen to me	15	
	Respect me/treat me respectfully	12	
	Take notice/pay more attention to me	8	
	Take me seriously	5	
	Value/consider my opinion	4	
	Admire/look up to me	2	
	Other: assume I had made good life choices, care about me, find me smart enough to notice my stance on renewable energy, have some superficial admiration for me, hopefully see me as a leader who is genuine, look to me for inspiration and guidance, open up to my ideas, take photos of me, think more of me, trust me more, value me.	11	
	Total:	57	41.0%
Negativity from others	Be jealous/envious	3	
	Pretend to respect me	2	
	Try to bring me down	2	

	Other: dislike me, either play to my high status or try to undermine it, find fault in me, hate me, have tall poppy syndrome, judge me harshly, judge me more, laugh at me because I can't sustain it, other people would think I care about superficial/wealth related things, perceive me as stuck up or over opinionated, resent my status, some would look down on my work as insignificant, talk about me.	13	
	Total:	20	14.4%
Social benefit	Help me (allow me to move up in position, be my minions, cooperate with me, help me to help them and others, invest in the causes I support, offer more resources for my goals, open doors for me)	7	
	Deference (be all over me, be influenced by me, be willing to be guided by me, try to gain my approval, require my attention)	5	
	Socially valued (invite me to more social events, maintain relationships with me, want to be my bestie, want to be friends)	4	
	Other: pay me more, stop bugging me	2	
	Total:	18	12.9%

Seek favours	Expect/seek help or favours (ask me for favours, expect beneficence and financial assistance, seek my help, request opportunities to access others that would benefit them, probably ask for money)	5	
	Fake friendship (annoy me and be fake friendly, be my friend just to advance themselves, befriend me for the wrong reasons, try to attach themselves to me to look good, try to be friends without meaning it)	5	
	Seek my advice/guidance/input	3	
	Try to win my favour (try to get my favour to benefit from my status, suck up to me)	2	
	Other: take up a lot of time, try to influence me for their benefit, try to take advantage.	3	
	Total:	18	12.9%
Miscellaneous	Mixed treatment (be attracted to me with good and bad motives, maybe have more respect but not always, look up to me but feel distanced, people differ in the way they interact with high status people)	4	
	Hopefully not change (hopefully not care about my status, hopefully not stop being my friend, hopefully treat me the same)	3	

I don't know   2

Treat me differently   2

Other: be empowered by my enthusiasm
and generosity, expect more, expect to
see a change in me, I find it egotistical
to make such broad statements, I would
need a terrific team to support me, I
would not always have to refer to my
past, I would proudly and under
supervision follow the rules, likely they
will probably not care that much, make
it difficult to remain focused on
important tasks, not applicable, probably
filter out of my life and have others of a
similar status in my life, you can't tell
what people will do regardless of status,
some would benefit from my work, still
choose their own path but I do influence
some, still not know me.   15

Total: 26   18.7%

Grand total: 139

Table 9

Responses to the question "People who do not care about having high status are:" (n = 88)

Category	Examples	Freq.	% of total
Positive quality	Confident/self-confident	5	
	Free	5	
	Relaxed	3	
	Sensible	3	
	Real	2	
	Secure	2	
	Self-aware	2	
	Well-balanced	2	
	Other: badass, brave, can interact with others of all sorts of status successfully, centred, connected, down to earth, generally use it for good, genuine, humble, instinctive, know who they are, love themselves, rational, realistic, self-contained, self-motivated, smart, unassuming, well-adjusted.	19	
	Total:	43	28.3%
Happy	Happy/content/satisfied with current status/situation	9	
	Content	8	
	Comfortable with themselves	6	
	Happy/happier	5	

	Other: at peace with themselves, people who are reconciled with their innate "gifts" and talents.	2	
	Total:	30	19.7%
Positive evaluation	Awesome	2	
	Good people	2	
	Interesting	2	
	Other: better off, better than I, fine - being happy is what matters, lucky, more worthy of respect than those who do but get less, on the right track, perfectly fine - it's not for everyone, probably deserve it the most, respected all the same, stress-free, the best friends, the true top status.	12	
	Total:	18	11.8%
Uninterested	Care about other things (care more about others than about a label, less distracted from the bigger picture and the greater good, more focussed in doing good rather than looking good, value system is not aligned with high status)	4	
	Uninterested	3	
	Don't care what others think of them	2	
	Don't want attention (don't want to be seen or noticed, not so attention-seeking)	2	

	Other: don't need adulation of others to prop up their self-image, have other goals that aren't about what people think, just want to live their lives, not influenced by social pressures, rather not take the responsibility with maintaining it to achieve their goals, seeking a quieter and less demanding life.	6	
	Total:	17	11.2%
Normal	Normal	8	
	Human/people	2	
	Total:	10	6.6%
Negative evaluation	Lack ambition	2	
	Other: complacent, ignorant of how the world works, kidding themselves, lacking imagination, not drivers of change, oblivious, unmotivated.	7	
	Total:	9	5.9%
Already high status	Have high status already	4	
	Maybe they already have something to inherit	1	
	Probably privileged and unaware of it	1	
	Total:	6	3.9%

	Lack opportunity (maybe they have other things to worry about like getting enough money, perhaps they don't see high status as an option for them, perhaps they have less opportunities to see the need or to try to change the world, unable to reach it, unclear on how high status would benefit them	5	
Miscellaneous	Other: claiming this as a protective mechanism to support their self-esteem, depends what you mean by status, entitled to their world view, have encountered few obstacles or overcome them, hopefully like me - respected but not stuck up, I wonder if everyone cares to some degree, like me, likely to get high status if they work hard, me, might be lying when they say they don't care, most people don't think about status as much as fame, probably have a different idea of what status means, some people might think they are lazy and unmotivated, unusual since we are wired to seek/respect status.	14	
	Total:	19	12.5%
	Grand total:	152	

Table 10

Responses to the question "Aspiring to have high status reveals that a person is:" (n = 88)

Category	Examples	Freq.	% of total
Negative quality	Shallow/superficial	7	
	Narcissistic	6	
	Desire power	4	
	Not happy/content with current situation	4	
	Self-centred/selfish/self-serving	4	
	Aggressive	3	
	Attention-seeking	3	
	Concerned with how others perceive them	4	
	Insecure	3	
	Vain	3	
	Arrogant	2	
	Egotistical	2	
	Greedy	2	
	Materialistic	2	
	Stupid	2	
	Want/need approval	2	
	Inadequacy (challenged, feelings of inadequacy, feels powerless, frustrated, lacking self-acceptance, low self-esteem, needs status to feel confident in themselves, needy, self-conscious)	9	

	Immoral (calculating, conniving, dishonest, possibility of compromising ethics and principles to achieve goals)	4	
	Dominating (concerned about dominating people, demanding, difficult, pushy)	4	
	Psychological problems (less developed and aware, people wanting fame for the sake of it are troubled, possible personality disorder)	3	
	Unsatisfied (don't appreciate what they have, learned not to be content in life regardless of status)	2	
	Other: a bit of a dick, ambition got in way of happiness, self-important, thirst for authority, thirst for money, vacuous, want to receive different treatment.	7	
	Total:	82	42.1%
Positive quality	Ambitious	30	
	Motivated	7	
	Driven	6	
	Desire a better life/better themselves	4	
	Prepared to work/good work ethic/hard working	4	
	Intelligent/clever	3	
	Believe in themselves/their own capacity	2	
	Has goals	2	

	High achiever	2	
	Passionate	2	
	Wants to make a difference	2	
	Other: a leader, autonomous, confident, determined, interesting, lucky, persistent, proactive, ready to achieve, takes risks, talented, realistic, willing to put themselves out there, maybe want to serve others, might want to try and make the world a better place.	15	
	Total:	79	40.5%
Neutral	Competitive	4	
	Normal/human/a person	4	
	Desire to be influential	2	
	Not necessarily a bad thing	2	
	Other: aware of the opinions of others, class conscious, everyone wants life to be easier, keen to get advantages of high status, keen to prove themselves, socially conscious, might be poor wanting to be rich, think that life is better than it probably is in reality, trying to play the competitive capitalist game we live in, wants to be well known.	10	
			11.3%
	Total:	22	

Depends	Depends on their motivation for aspiring to high status	3	
	Depends on type of status	2	
	Other: depends on how high the status is they aspire to, depends on what they are willing to do and what they expect.	2	
	Total:	7	3.6%
Miscellaneous	Not sure	2	
	Other: appear motivated but can have great character flaws, either "gifted" or "disingenuous", possibly misinformed about high status being good.	3	
	Total:	5	2.6%
	Grand total:	195	

Appendix E: Ethics approval letter

Dear Professor Wheeler and Ms Alba,

RE: Status consciousness: Individual differences in how much people think about social status (5201000480D)

Thank you for your response.

I am happy to advise you that your application titled, "Status consciousness: Individual differences in how much people think about social status", has now been approved. You may commence your research and a copy of the letter of Final Approval will be sent to you in the mail shortly.

In the meantime, please accept this email as notification that your project has been granted final approval.

Please do not hesitate to contact me if you have any concerns.

All the best with your research.

Kind regards

Kay Bowes-Tseng

--
Office of the Deputy Vice Chancellor (Research)

Ethics Secretariat

Research Office
Level 3, Research HUB, Building C5C
Macquarie University
NSW 2109

Ph: +61 2 9850 6848
Fax: +61 2 9850 4465

Email:

For Enquiries: ethics.secretariat@mq.edu.au