

VU Research Portal

The tall and short of it:

Knapen, J.E.P.

2017

document version

Publisher's PDF, also known as Version of record

[Link to publication in VU Research Portal](#)

citation for published version (APA)

Knapen, J. E. P. (2017). *The tall and short of it: On the role of human height in social perception, interpersonal interactions, and individual differences.*

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

E-mail address:

vuresearchportal.ub@vu.nl

This dissertation aimed to further our knowledge about the psychology of height, or how height may influence behavior. From an evolutionary social psychology perspective, we hypothesized that individuals pay attention to height cues in social interactions. These height cues can be external, when perceiving other individuals' height, or internal, when perceiving one's own height. Furthermore, these height cues may be used as input in psychological mechanisms influencing behavior in different domains, for example when competing over mates or resources, when forming and maintaining coalitions, or when allocating social status. Thus, both internal and external height cues could influence perceptions of other individuals, (interpersonal) behavior, and self-perceptions. Our goals were to investigate a more integral examination of the psychology of height by (1) complementing and extending social perception research regarding height and prestige; (2) developing a line of research on the effects of height on actual behavior; and (3) constructing a measure for individual differences in self- and social appraisals of height. Accordingly, the dissertation consists of three parts: part one consists of chapters two and three, and deals with social perception of height; part two consists of chapters four and five, and deals with the effects of height on actual interpersonal behavior; and part three consists of chapter six, which describes the development and validation of a scale measuring individual differences in height appraisals.

Part I: Social perception of height – Social status

Chapters 2 and 3 focused on the positive perceptual association between body size and social status. Research suggests that individuals make use of a 'bigger-is-better' heuristic when perceiving other individuals (e.g., Hensley & Cooper, 1987; Young & French, 1996). In Chapter 2, we aimed to test the strength and bi-directionality of this heuristic by examining whether 'better' (prestige) also leads to appraisals as 'bigger' (taller and heavier; a "better is bigger bias", or "BBB"). We investigated social perception of football players, because football is a sport in which performance and physical size tend to be uncorrelated (thus the association is not useful). We examined real coalitional sports groups on a national- and team level by having football fans estimate the players on multiple measurements of physical

formidability. Next, we had participants estimate a fictional football player on multiple measurements of physical formidability, while manipulating the player's performance. Results of 3 studies indicate the existence of a BBB: the association between social status and body size is so strong, that individuals even estimate 'better' performers as 'bigger' when this is not necessarily useful, and this association is stronger for individuals who are more invested in the team (coalitional affiliation). In Chapter 3, we aimed to replicate and extend earlier research on height perceptions of political leaders. Studies by Higham and Carmant (1992) and Sorokowski (2010) suggested that supporters perceive their leaders as taller than non-supporters do, and winners are perceived as taller after the elections, while losers are perceived as shorter after the elections (winner/loser effects). We examined whether in-group leaders' formidability was overestimated more than out-group leaders' formidability, and whether this status-size association was driven by prestige. Furthermore, we examined possible gender differences in making formidability estimations. Participants were asked to rate a randomly assigned Dutch politician on physical formidability features before and after the elections. Results suggested that estimated physical formidability of political leaders was affected by motivated perception, as prestige was positively associated with estimated formidability, and in-group leaders were estimated more formidable than out-group leaders. However, earlier findings that men make larger estimations than women (because of their own larger body size) were not supported. Although we did not replicate a winner-effect (greater estimations of formidability after winning the elections), we did find some evidence for a loser-effect (smaller estimations of formidability after losing the elections).

Part II: Interpersonal behavior and height

Chapters 4 and 5 focused on the effects of height on actual behavior in men. Chapter 4 studied the effect of height cues on interpersonal behavior from an intra-sexual competition perspective, and Chapter 5 studied the effect of height cues on interpersonal behavior from an inter-sexual competition perspective. In Chapter 4, we used a quasi-experimental approach to examine actual behavioral effects of (relative) height in a competitive context. We applied an evolutionary psychological perspective on the Napoleon complex theory and we expected that, given the costs associated with direct physical

aggression, relatively shorter males would be more likely to show indirect aggression when competing over resources with taller males. We used economic games to mimic real-life competitive interactions. All three studies provided support in line with the Napoleon complex: short men used different behavioral strategies than tall men did in order to acquire resources.

In Chapter 5, we aimed to examine actual competitive behavior between males over a female by manipulating height of a male rival. Previous research has shown that men are more prone to risk-taking behavior when an attractive female is present, suggesting that men use risk taking as a self-presentational strategy to impress potential mates (e.g., Frankenhuys, Dotsch, Karremans, & Wigboldus, 2010; Ronay & Hippel, 2010). We hypothesized that when men compete over women, not only the presence of an available female, but also the physical formidability of any male rivals affects their behavior. We used a Virtual Reality design to manipulate the height of male competitors, assigning male participants to either a short male rival or a tall male rival. Both participants and their virtual rivals had to cross an unstable looking bridge over an abyss (the speed of their crossing was the dependent measure of risk taking), while an attractive virtual female was viewing the participants' behavior. Our main hypothesis was not supported: risk taking behavior did not differ between the short rival and tall rival conditions, nor did we find any effects of relationship status on behavior in the VR environment. Men in the tall rival condition did value a date with the woman more than men in the short rival condition did, suggesting that rival height had a positive effect on their perception of the outcome of the competition.

Part III: Individual differences in height appraisals

The aim of Chapter 6 was to develop and validate a scale for measuring self-perceptions and social constructions of height. We theorized that how someone feels about their own height, and how important they think that height is in the social environment, is an important factor of how individuals will feel and behave in height-related social contexts. Across three studies with Dutch and US samples, we developed and validated the *Height Appraisals Questionnaire* (HAQ). The HAQ showed excellent reliability, and good test-retest reliability. Furthermore, the HAQ showed discriminant validity with self-esteem, social comparison, and body image self-evaluation, and convergent validity with self-reported height.

Conclusion

In this dissertation, we have shown that height is an important factor in social perception, interpersonal behavior, and self-perception. Our results suggest that the association between prestige and body size is strong and bi-directional, and that this association is stronger for individuals who are more invested in the group (when perceiving in-group individuals). Furthermore, we conclude that distortions in judged formidability related to social status seem to be the result of motivated social perception in order to promote group functioning and leadership. We also found that in dyadic intra-sexual competitions, relatively shorter men respond to physical cues that they are less competitive, and as a result, show more behavioral flexibility to acquire resources. Lastly, we developed a scale for measuring self-perceptions and social constructions of height. The HAQ could be an interesting tool to examine underlying psychological mechanisms of height related behavior. We hope this dissertation will inspire other researchers to give more attention to an integral approach to height-related behavior.