From Style to Status and to Power: When and Why Do Stylistic Choices in Footwear Make Women Feel and Act Powerful?

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ABSTRACT

This work examines the interplay between power, status and style. Building on the dual role of power and status as two primary sources of social influence in contemporary consumer society, we propose that stylistic choices associated with greater status can imbue the wearer with greater feelings of power. We focus on a pervasive stylistic choice for women—whether to wear heels—and test two critical relationships regarding consumers’ choice of heels that can act as a bridge between status and power. First, we propose that the stylistic choice of wearing heels increases wearers’ perceived status (but not perceived power)—the heeled status-enhancement hypothesis, whereby (1) wearing heels increases wearers’ perceived status (but not perceived power) among observers and (2) lacking power (vs. having power or baseline) yields greater desire for heels over flats. Second, we propose that an increase in status stemming from wearing heels increases consumers’ feelings and behaviors of high power—the status-power transfer hypothesis. Three studies confirm the use and perception of heels as status symbols and provide support for both hypotheses. We show that wearing heels (vs. flat shoes) makes individuals feel and behave more powerfully by thinking more abstractly and taking more actions, two hallmarks of high power, but only when heels are worn conspicuously (i.e., the wearer knows the observer sees them). In addition, these effects are mediated by wearer’s feelings of power and unexplained by perceptions of sexiness. Implications for the literatures on style, status, power and conspicuous consumption are discussed.

249 words

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In 1533, when Catherine de Medici decided to wear heels – a stylistic choice uncommon at the time – at her wedding to the Duke of Orleans, her goal was clear: to outdo his tall mistress by signaling her superior social status as queen. Since then, heels have become a distinctive style within the footwear industry and wearing heels is routinely imbued with status value (Semmelhack 2008; Scott 2005; Shawcross 2014). In 2011 alone, women spent $38.5 billion on shoes in the U.S. alone, of which more than half went to heels (NPD Report 2011). The economic impact of heels and their centrality in the fashion industry may stem, in part, from the fascination this stylistic choice exerts on consumers’ beliefs about their own identity, status and power (Benasra 2011). For instance, New York City-based artist Nikki Schiro once declared “It’s not about being arrogant; it’s more about power. When I wear heels, I get a power trip” (Benasra 2011). Taking Schiro at her word, the current work aims to answer two basic questions: first, can making a stylistic choice such as wearing heels enhance the wearer’s status in the eyes of others? Second, can this surplus of status carry over to the wearer’s behavior, confer her a greater sense of power and make her behave more powerfully?

We build off the distinction between status (respect and admiration in the eyes of others) and power (feelings of control over valued resources in social relationships; Magee and Galinsky 2008), two sources of social influence underlying individuals’ rise or fall in the social strata (through the gain or loss of power or status). Power and status are conceptually distinct. To illustrate, a political advisor unknown to the public can have significant control over important decisions without having an official position (high power, low status). Conversely, the Queen of England has high status but little power over policy decisions. Empirically, past efforts have shown power and status have distinct antecedents and consequences (e.g., Blader and Chen 2012). As such, the bulk of research to date has largely treated them separately.
Although distinct sources of influence (Boldry and Gaertner 2006), power and status often covary and interact in everyday life to influence one’s behaviors and experiences. For instance, high power can increase a communicator’s persuasiveness and as a result his likelihood to get a job (Lammers et al. 2015). Similarly, displays of high status can attract others’ attention and lead them to share more resources in the form of attention or money (Nelissen and Meijers 2011). For instance, in one study, participants offered to a job applicant a higher hourly wage when he was wearing a luxury shirt (vs. a plain shirt; Nelissen and Meijers 2011). Although past work does not speak to whether status may alter the extent to which consumers psychologically feel powerful and thus behave move powerfully, these findings lay the foundation for a potential transferability between power and status.

The current work explores this possibility in the context of a pervasive consumer stylistic choice – heels. We first establish that heels enhance the wearer’s status – the heeled status-enhancement hypothesis by showing that consumers’ perceptions of and desire for heels bear high similarity to those consumers typically hold towards status goods. Specifically, if heels are status-enhancers, (1) wearing heels should increase wearers’ perceived status (but not perceived power) among observers and yield increased social and financial benefits (Nelissen and Meijers 2011) and (2) lacking power (vs. having power or baseline) should increase the desire for heels (Dubois et al. 2011; Rucker and Galinsky 2008). Next, we propose that making stylistic choices associated with status – such as heels – can confer a psychological feeling of power and consequently activates behavioral propensities typical of high power – the status-power transfer hypothesis. In particular, we show that wearing heels makes individuals think more abstractly and more action-oriented, two hallmarks of high power (Galinsky et al. 2003; Smith and Trope
Given the social nature of status (Dubois and Ordabayeva 2015), we expect this effect to be confined to situations when heels are visible to others, regardless of their gender.

The current work contributes to previous studies differentiating between status and power (e.g., Blader and Chen 2012; Fast et al. 2012; Fragale, Overbeck, and Neale 2011) by exploring their interplay in consumption. Novel to our work, we demonstrate that consumers’ choice of styles associated with status can have a transformative effect on the wearer’s own feelings and behaviors of high power above and beyond the social benefits tied to others’ reactions to the display of status goods (e.g., Nelissen and Meijers 2011). We also contribute to the literatures on style (Godart 2018) and fashion (Aspers and Godart 2013; Davis, 1992; Tulloch 2010) by suggesting that consumers’ stylistic strategies (e.g., wearing heels) can both reflect their socio-psychological state and impact their behavior in the marketplace.

Next, we start off the role of heels as a pervasive consumer stylistic choice in contemporary fashion and review past evidence supporting the perspective that heels can enhance wearers’ perceived status among observers. We then turn to status consumption before introducing power and delineating the relationship between power and status. Building on these findings, we formulate novel hypotheses regarding how the study of heels as a stylistic choice may inform our knowledge about both power and status and describe three supporting studies. The first two studies test the heeled status-enhancement hypothesis by investigating whether (a) wearing heels affords wearers with greater status benefits (i.e., greater attention from others and financial rewards; Study 1) and (b) lacking power increases individuals’ preference for heels over flat (Study 2). Study 3 tests the status-power transfer hypothesis by examining whether wearing heels fosters feelings of power and increases abstraction and action-orientation behaviors in public – but not private – settings (Study 3).
HEELS: ICONIC STATUS SYMBOLS WITHIN FOOTWEAR

Because of their mix of utilitarian and hedonic functions in the consumer context, stylistic choices within footwear play a significant role in shaping consumers’ sense of self (Belk 2003; Crane 2005; Scott 2005). According to Belk (2003), “Shoes act not only as temporary carriers of our identity in the contexts in which we wear them. Rather, shoes move from being identity prosthetics and props for self-presentation to being seen as inseparable parts of our extended selves.” In the past, the mere possession of shoes was enough to confer the image of someone with taste and manners, with the rich being known as “people with shoes” (Heyman 1994; Wright 1922). Consumers perceive footwear as a tool to transform the self. For example, people believe that shoes can affect their athletic performance (Bloch, Black, and Lichtenstein 1989; Telander 1990; Van Pelt 1988). Of note, past work has linked shoes with behaviors typically assessed in social contexts – such as good manners or athletic performance, consistent with the idea that consumers use shoes to communicate status and acquire respect or admiration from others on socially valued dimensions (Magee and Galinsky 2008).

A particularly effective way to signal one’s standing vis-à-vis others is through conspicuous products or actions that are visible to others (Bagwell and Bernheim 1996; Veblen 1899). Within global contemporary footwear, heels – footwear that raise the heel significantly higher than the toes – have emerged as a distinctive style, that is, a durable, recognizable pattern of aesthetic choices (Godart 2018) – with high popularity and cultural impact (Scott 2005; Semmelhack 2008; Shawcross 2014). An analysis of publicly available social media content and news between 2017 and 2019 in the US reveals that the hashtag #style was the 4th most co-mentioned hashtag along with the hashtag #heels (and just after the hashtags #fashion and
And, in the UK alone in 2016, 37% of British female consumers bought at least one pair of heels (BBC 2016), making them the third most popular type of shoes after flat shoes (51%) and trainers (37%). In the same vein, search volumes of four shoe styles from 2008 to 2018 in the US revealed that the keyword “heels” was the most searched term followed by sneakers (Google shopping queries; Figure 1). Testifying of the strong association of heels with fashion, an analysis of search volumes for “heels” and “fashion show” shows that spikes in queries for heels tend to follow spikes in queries for fashion shows (Web search queries; Figure 2). Besides the sheer size of the market, heels are iconic emblems of contemporary fashion that are core to many cultural productions, from books to movies and even museum exhibitions (e.g., Benasra 2011; Small et al. 2014; Vartanian and Bruzzi 2011).

Although fashion, popular culture and the visual arts (from the acclaimed TV show Sex and the City to paintings by Andy Warhol) often focus on heels typically more than 3 or 3.5 inches high, daily wear mostly consists of low-to-medium height heels. According to a 2013 survey, two thirds of French females reported wearing heels from 1.2 to 3.4 inches on a daily basis; only 5% wore heels higher than 3.5 inches daily (Fédération Française de la Chaussure 2013). Since the focus of our study is stylistic choices within everyday consumption, we examine heels of average height, widely available and worn in everyday life (i.e., 2.75 inches).

A key explanation for their unique position in the footwear category stems from the role of heels in shaping status identity (Enstad 1998; Scott 2005). In ancient Egypt, Greece and

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1 To perform this analysis, we relied on data from Digimind (www.digimind.com), a global social media monitoring and competitive intelligence service that collects public social media content across the globe (e.g., Twitter, public pages on Facebook or Instagram, as well as published news articles and blogs). We conducted the analysis within Digimind’s historical search tool function that compiles all the data collected by the company for two years. Within all the social media content collected in the US between Jan 2, 2017 and Jan 2, 2019, the top hashtags (i.e., hashtag most associated with the focal term “heels”) were: 1) #heels: 31,145; 2) #fashion: 21,930; 3) #shoes: 14,063 and 4) #style: 12,502.
Rome, they set the nobility apart, as reflected in murals dating back to 3,500BC and depicting members of aristocracy with footwear similar to contemporary heels. Their specific use as status enhancers may be due to their conspicuousness, and in turn to the fact that they make the wearer seem taller, a known marker of status (Dannenmaier and Thumin 1964; Wilson 1968). Taller adults hold jobs of higher status (e.g., Gowin 1915; Judge and Cable 2004) and have typically higher self-esteem (e.g., Wilson 1968; Young and French 1996).

In support of the heels-as-status-enhancer perspective, recent research on fashion choices found that women adjust the height of heels purchased to local fashion, but only when moving upward (i.e., to a more affluent, high-status location). In contrast, they tend to ignore local norms when moving to a relatively lower status location (Galak et al. 2016). This suggests that consumers strategically adjust heel height to maximize their status in a new environment where they have yet to form social ties. Also consistent with a status perspective, industry research looking at the relationship between economic context and consumer preferences for different heights of heels found that higher heels tended to emerge during a recession (IBM 2011), a result in line with the known tendency to turn to status-signaling goods during economic downturns (i.e., “the lipstick effect”, Hill et al. 2012).

To garner further evidence for the link between heels and status, we recruited 242 US female participants ($M_{age} = 33.1, SD = 12.4$) on Amazon’s Mechanical Turk and assessed their need for status, the number of shoes they owned and the proportion of heels owned. If heels are used as status enhancers, we reasoned that individual’s need for status should be positively associated with heel ownership (but not overall shoe ownership). As part of a survey presented as questionnaire on consumer habits, respondents indicated how many pairs of shoes they owned and what percentage were heels. We also assessed the extent to which participants enjoyed
wearing heels and how much wearing heels hurt them on a 7-point scale (from 1: not at all to 7: very much so) as well as their age and height. Key to the study, participants completed four items assessing their need for status (Dubois, Rucker and Galinsky 2012); “I have a desire to increase my position in the social hierarchy”; “I want to raise my relative position to others”; “climbing the social ladder is a priority for me”; “I would like to be viewed as being of higher standing than others”; 1: not at all to 7: very much so; averaged into a need for status index; α = .95). As expected, participants’ need for status was a significant predictor of the percentage of heels owned, B=.04, t(242)=5.55, p<.001, but not the overall number of shoes owned, p=.16. The inclusion of age, income level, marital status, enjoyment of heels, pain when wearing heels and height did not affect the results at significance level.

Altogether, while past work and initial empirical evidence suggest that consumers’ stylistic choice of heels can signal status, little is known about whether and how they may act as status enhancers and the extent to which they transform the wearers’ feelings and propensity to act powerfully. To address these questions, we review past work on status consumption and the interplay between status and power in consumption before examining the potential role that heels may hold as a bridge between these two constructs.

**STATUS, POWER AND CONSUMPTION**

Status and Conspicuousness

The need for status is a fundamental human motivation, referring to an individual’s or group’s desire to win respect or admiration from others (e.g., Anderson et al. 2015; Bourdieu 1984; Correll and Ridgeway 2006; Magee and Galinsky 2008). Given the social fabric, status perceptions originate from social distinctions or recognition, such as one’s level of education or
group membership (e.g., social class; Dubois and Ordabayeva 2015; Dubois, Rucker and Galinsky 2015). In consumption settings, status-enhancement often stems from the ability to purchase goods that separate the ‘haves from the have-nots’ by erecting economic (e.g., high price) or physical (e.g., restricted availability as for private club memberships) barriers. In his seminal work “The Theory of the Leisure Class” (1899), Veblen pointed to the role of wasteful expenditure on silver spoons and corsets as a way to display one’s resources to others. In this context, conspicuous stylistic solutions (e.g. logos, Han et al. 2010) can effectively respond to consumers’ need for status. In support, evidence found a significant link between prestige goods and social visibility (Heffetz 2011).

Individuals strategically turn to or use status-enhancing options when these options offer them the most status value. For instance, in the context of romantic relationships, Wang and Griskevicius (2014) found that while males valued mate attraction, females valued mate retention; thus, males turn to high-end conspicuous consumption during the seduction phase to differentiate themselves from their competitors, whereas females adopt such behavior during the relationship to keep potential rivals at a distance. Other research found that the steeper the social hierarchy, the more individuals turn to conspicuous options as a means of leapfrogging a large number of people (Ordabayeva and Chandon 2011).

Seeking status is important for individuals because having status can provide social benefits in the form of greater compliance from others or greater financial rewards (e.g., greater donations; Nelissen and Meijers 2011; see also Dubois and Laurent 1996; Fennis 2008; Han, Nunes, and Drèze 2010). For instance, Nelissen and Meijers (2011) found that wearing a luxury shirt can yield actual benefits such as receiving more time or money from others that in turn
strengthen one’s status. Status can also provide health benefits such as a lower risk of illness, higher life expectancy and increased well-being (Kuper and Marmot 2003; Marmot 2004).

While evidence abounds that individuals seek status through consumption, less is known about why using products that enhance one’s status yield beneficial social outcomes. One possibility, consistent with the bulk of work outlined in this section, is that others favorably interpret status signals and are thus disposed to engage positively with the individual wearing them. For instance, a consumer may be more likely to respond to a request to fill in a questionnaire when the researcher is wearing a luxury shirt (vs. not) because the researcher is perceived as being more confident and ultimately more trustworthy. Indeed, respected individuals are often entrusted with valued resources (Magee and Galinsky 2008; Thye 2000). A related possibility is that status signals may perceptually expand the presumed resources of the researcher, who would therefore have more success because of the perceived increase in the value of resources over which s/he has control (Thye 2000).

Another possibility is that status signals from stylistic choices have a transformative effect on consumers’ feelings and behavior, ultimately resulting in more positive outcomes. For instance, a researcher may feel more powerful when wearing a luxury shirt (vs. not), which may in turn affect his persuasiveness (Dubois et al. 2016) and ultimately his effectiveness in convincing an audience to comply with her request. We examine the latter possibility and test whether using status signals associated with consumer stylistic choices affects the consumer’s feelings of power, another key mode of influence in the social hierarchy.
An alternative source of influence to status, power – or control over valued resources – is instrumental to the functioning of the social hierarchy (Blau 1964; Magee and Galinsky 2008; Mannix and Sauer 2006; Thye 2000). Power varies from situation to situation, from relationship to relationship (Anderson and Berdahl 2002; Dubois et al. 2010) and permeates the psychology of how people feel and behave (Keltner and Robinson 1997; Rucker et al. 2012) in ways that foster its retention (Fiske 1993; Keltner et al. 2003; Rucker et al. 2012). In particular, high power (relative to low power) increases the likelihood to act (Galinsky et al. 2003; Guinote 2007) and the ability to think in abstract terms (Smith and Trope 2006). Critically, these two propensities – action-orientation and abstraction – yield greater influence in interpersonal settings and success within leadership positions (e.g., Podolny et al. 2005; Ibarra et al. 2014).

Power and status represent distinct modes of influence that regulate rank dynamics by modulating the rise and fall of individuals in social hierarchies (for similar conceptualization, also work on prestige vs. dominance; see Cheng et al. 2013; Maner and Case 2016). For instance, an individual may rise in the social strata after being recognized for a professional affiliation (e.g., receiving a best paper award; status) or because they are suddenly granted greater authority at work. Empirical findings suggest power and status have distinct antecedents and consequences (Blader and Chen 2012; Hays and Bendersky 2015). For instance, status is positively associated with justice toward others, while power is negatively associated with justice toward others (Blader and Chen 2012).

Because of their common role in regulating rank dynamics in social hierarchies, we propose that status and power may act as substitutes for one another. A lack of power, for instance, triggers a compensatory desire for visible high-status options such as clothing, jewellery or cars (Charles et al. 2009). In one study, participants who recalled an episode in
which they lacked power indicated a greater desire for options susceptible to enhance their status such as cufflinks, executive pens, briefcases, fur coats and silk ties (Study 1; Rucker and Galinsky 2008; see also Dubois et al. 2011; Mazzocco et al. 2012). Thus, if heels act as status-enhancers, lacking power may prompt individuals to seek status through a stylistic preference for heels over flat shoes.

In addition, if power and status represent two mutually reinforcing sources of influence in social contexts, we propose that they may mutually reinforce one another within an individual. As such, using a product susceptible to enhance the wearer’s status may have a transformative effect by increasing her feelings of power and associated propensities. Thus, if heels act as status-enhancers, wearing heels may increase the wearer’s power propensities. In support wearing clothes associated with a domain (e.g., a lab coat for a scientist) can increase motivation and performance in that domain (e.g., solving a math problem, Adam and Galinsky 2012). Thus, if power and status are part of the same domain (rank regulators), experiencing an increase in one dimension should “transfer” to the other, and activate associated behavioral tendencies. The current study tests this possibility on two critical power propensities for success in interpersonal relationships: action-orientation (Galinsky et al. 2003) and abstraction (Smith and Trope 2006). Furthermore, if an increase in psychological power and power propensities stems from a transfer from status to power, we expect the effect of wearing heels on power-driven tendencies to be (1) mediated by the wearer’s feelings of power, and (2) be stronger when heels are worn privately (vs. publicly) given status is primarily measured “in the eyes of others” (Dubois et al. 2011).

Overall, we test two main hypotheses. The first hypothesis dubbed the heeled status-enhancement hypothesis involves two predictions:
H1A: Compared to wearing flat shoes, wearing heels increase wearers’ perceived status (but not perceived power) among observers.

H1B: Lacking power (compared to having power or baseline) yields greater desire for heels over flats.

The second hypothesis regarding the effect of consumer stylistic choice on wearers’ own feelings and behaviors of power – the status-power transfer hypothesis – involves three predictions:

H2A: Wearing heels (vs. flat shoes) will increase the wearer’s power-driven behavior in the form of greater action-orientation and abstraction.

H2B: The effects of wearing heels (vs. flat shoes) on power-driven behaviors will be mediated by the wearer’s feelings of power.

H2C: The effect of wearing heels (vs. flat shoes) on power-driven behavior will be reduced when heels are worn privately (vs. publicly).

Next, we describe three studies that systematically examine this set of hypotheses. We report all manipulations and any data exclusions in our experiments. Sample sizes were based on subject availability as well as unrelated research projects run in conjunction with these experiments. No additional data were added after analyses.

**STUDY 1: DOES SHOE STYLE INCREASE PERCEIVED STATUS IN THE EYES OF THE BEHOLDER?**
This study investigated whether merely wearing heels can trigger status (but not power) perceptions in the eyes of observers.

Procedure

Eighty-eight participants (53 female; \(M_{\text{age}} = 23.02, SD = 3.07\)) from a large metropolitan area were randomly assigned to one of two conditions (shoe style: flat shoes vs. heels) as part of a lab study, in which the research assistant administering the session wore flat shoes or heels (2.75 inches). We chose shoe models that were visually similar except for the heel height (see Figure 3 for stimuli).

In addition to greeting and paying participants, the assistant was in charge of sequentially distributing and collecting a series of questionnaires for other research projects that were part of the experimental session. Notably, all other research projects were disassociated from status or power. At the very end of the session, participants completed a short lab satisfaction survey assessing three aspects of their experience on a 7-point scale (1: not at all to 7: very much so): the lab location (“How easy was it to locate the lab?”; “How convenient is the lab location?”; \(\alpha=.91\)), the lab facilities (“To what extent did you enjoy the facilities?” and “To what extent were the computer settings well-designed?”; \(\alpha=.85\)), and the research assistant’s perceived power (“To what extent did the research assistant feel in control?”; “To what extent did you feel the research assistant had power over participants?”; \(\alpha=.94\)) and perceived status (“To what extent did you feel the research assistant was respected?”; “To what extent did you feel the research assistant was esteemed by participants?”; \(\alpha=.91\)).
Next, we built four separate indices reflecting perceptions towards the lab location, the lab facilities, the research assistant’s perceived power and perceived status. Status and power were not significantly correlated (Pearson $r=.85, p=.43$). A one-way ANOVA revealed there was no differences in perceived power across conditions ($F<1$), and power was thus not further considered. In addition to using direct measures of perceived status, we also asked participants the extent to which they would extend financial or time benefits to the research assistant. Indeed, individuals perceived as high-status (e.g., wearing a luxury shirt; Nelissen and Meijers 2011) are granted greater resources in the form of a higher salary or more time to complete a survey. Two items assessed status benefits in the social and financial domains: “If the research assistant were to kindly ask people on the street to fill out short surveys, what percentage of people do you think would agree to help her? The typical percentage is 15%,” and “If you were to hire this research assistant, what hourly wage would you give her? The typical hourly wage for researchers is €10.” Finally, one item (7-point scale, 1: not at all to 7: very much so) controlled for perceived comfort: “To what extent do you think these shoes are comfortable?”

**Results and Discussion**

We conducted a series of one-way ANOVAs with shoe style as a factor. There was no effect of shoe style on perceptions of the lab location, the lab facilities or the research assistant’s power ($F<1$). The lack of effect on power perceptions suggests that observers did not view heels as a power signal nor viewed a target as having more power when wearing heels than when wearing flat shoes. However, there was a significant effect of shoe style on the research assistant’s perceived status such that participants viewed her as having greater status when she was wearing heels ($M=5.24, SD=1.71$) than when wearing flat shoes ($M=4.45, SD=1.63; F(1,
The effect of shoe style also influenced the extent to which the research assistant could enjoy status-relevant benefits in the social and financial domains. Specifically, participants thought a greater percentage of people would help the research assistant if she were to administer a field survey in heels ($M=21.77\%, SD=11.15$) compared to flat shoes ($M=16.62\%, SD=10.11; F(1, 86)=5.13, p=.026, \eta^2_p=.056$). In addition, participants thought she deserved a higher wage when wearing heels ($M=\text{€}13.42, SD=5.94$) than flat shoes ($M=\text{€}10.07, SD=5.07, F(1, 86)=8.07, p=.006, \eta^2_p=.086$), consistent with Nelissen and Meijers 2011. Finally, there was an expected effect of shoe style on comfort, such that participants thought the research assistant was more comfortable in flat shoes ($M=5.16, SD=1.33$) than heels ($M=4.11, SD=1.35; F(1, 86)=13.55, p<.001$). Of note, the wage participants proposed to pay was unrelated to their perception of level of comfort ($Pearson\ r=.17, p=.88$) and comfort did not mediate the effect of heels on salary (95% CI=-2.05 to .31).

To investigate the underlying role of shoe style on social and financial benefits, we constructed two mediation models (Hayes 2013). The first model with shoe style predicting the likelihood of agreeing to help the research participants with perceived status as a mediator only revealed a main effect of perceived status ($B=2.44, SE=.644, t(85)=3.83, p<.001$) while the effect of shoe style was non-significant ($B=3.22, SE=2.17, t(85)=1.48, p=.14$). As a further indicator of successful mediation, the conditional indirect effect of perceived status (95% CI=1.18 to 4.30) on social benefits was significant. A second model predicting hourly wage from shoe style with perceived status as a mediator revealed a main effect of perceived status ($B=1.28, SE=.33, t(85)=3.86, p<.001$), while the effect of shoe style was reduced (from $B=3.35, SE=1.18, t(86)=2.84, p=.006$ to $B=2.34, SE=1.13, t(85)=2.08, p=.04$). As a further indicator of successful mediation, the conditional indirect effect of perceived status (95% CI=.18 to 2.48) on financial
benefits was significant. In both models, inclusion of comfort, age and gender as covariates did not alter the findings. On average, people offered to pay 33% more to the research assistant when she was in heels.

Overall, the study offers two critical findings: first, wearing heels increased the wearer’s perceived status, but not perceived power, among observers. By revealing a lack of association with power but a significant association with status, these results provide novel evidence that shoe style can enhance consumers’ status in the eyes of others without affecting power perceptions. Consistent with past work, wearing heels also yielded greater social and financial benefits to the wearer (Nelissen and Meijers 2011) and these were mediated by the increase in perceived status. The next study aims to provide further evidence that heels can enhance the wearer’s status by testing a byproduct of this possibility: if heels are tied to status, lacking power may trigger a preference for heels over flat shoes.

**STUDY 2: POWER AND SHOE STYLE**

*Procedure*

313 females (\(M_{age} = 37.1, SD = 10.7\)) were recruited from an online panel. 41 participants who failed the attention check and 69 females who either did not own or did not like wearing heels were excluded. Our final sample of 203 females (\(M_{age} = 37.5, SD = 10.6\)) were assigned to a 3-cell design. First, participants were asked to think of a time they had (high-power) or lacked power (low-power) over other individuals. Baseline participants wrote about the last time they went to the grocery store (Galinsky et al. 2003). Second, in a separate task ostensibly framed as a market research survey on consumer preferences, participants were shown
two pairs of shoes: one with a 0.5-inch heel and the other a 3-inch heel (Figure 5) and asked: “If you were at a store and had the opportunity to buy a pair, which pair of shoes would you choose?” Next, they indicated how painful they thought these shoes would feel as well as how comfortable they felt in heels (both 7 point-scales, 1: not at all to 7: very much so). Participants also reported the number of shoes and heels they owned and their height. Finally, participants filled an 8-item power manipulation check (α = .89; Anderson and Galinsky 2006).

Results and Discussion

Manipulation Check. Participants’ power was lower in the low-power condition (M=4.60, SD=1.30) than in both the baseline (M=5.01, SD=1.02; t(140)=2.08, p<.04, d = .35) and the high-power conditions (M=5.31, SD=0.93; t(110)=3.29, p=.001, d = .63). High-power participants also felt marginally more powerful than baseline participants (t(138)=1.75, p=.08, d = .31).

Choice of heels. A logistical regression revealed a significant effect of power ($\chi^2(2)=13.52, p=.001$): low-power participants were more likely to choose higher heels ($M_{low}=61.40\%$) than both baseline ($M_{base}=43.53\%; \chi^2(1)=4.39, p<.04$) and high-power participants ($M_{high}=27.27\%; \chi^2(1)=13.19, p<.001$). Further, participants were more likely to choose higher heels in the high-power than in the baseline condition ($\chi^2(1)=3.86, p=.05$), suggesting that greater feelings of power may reduce the desire for heels. The number of pairs of shoes, number of heels owned, and comfort in heels did not differ across conditions. Participants’ height and choice of heels were uncorrelated ($r=-.035, p=.63$) and results remained significant controlling for height ($\chi^2(2)=13.20, p=.004$). Overall, these results provide evidence for the heeled status-enhancement hypothesis. The final study aims to garner evidence to support
status-power transfer hypothesis by testing whether and when consumer stylistic choices can alter power-driven behaviors such action-orientation and abstraction.

**STUDY 3: FROM Style TO STATUS AND TO POWER: WHEN CAN SHOE STYLE INCREASE ONE’S SENSE OF POWER?**

This final study tested whether the experience of wearing heels affected the wearer’s power-driven behaviors and aimed to provide evidence for the moderating role of social visibility. Specifically, all participants completed two tasks standing but we varied whether they were in the presence of another person – a confederate (high visibility) or alone (low visibility). We expect the tendency of heel-wearers to feel and behave more powerfully to reduce in contexts when they are alone and thus where their heels are non-visible to others.

**Procedure**

119 females \((M_{age} = 22.27; SD_{age} = 2.56)\) were randomly assigned to a 2 (status signal: heel vs. flat) \(\times\) 3 (social visibility: male present vs. female present vs. no-one) between-participants lab study. Participants were recruited for a study interested in consumer evaluation of new products. Upon arriving at the lab, they were instructed to wear a pair of shoes for a few minutes, after which they would have an opportunity to give feedback on them. While standing and wearing a pair of heels or flat shoes, participants completed a questionnaire as part of a test for another researcher. The shoes were similar to the ones used in Study 1 (Figure 3). Research assistants were all female. Each participant was given a pair of shoes that fit both her size and
condition (flat vs. heel). As we only had both pairs of shoes available in two sizes (EUR 38 or 39, i.e., US 7.5 or 8.5), we only recruited candidates who wore these sizes.

In addition, we varied whether participants wore heels in public, or private. Building on findings that low (vs. high) social visibility reduces the perceived value of status goods (Dubois, et al. 2012), we expected the effect of wearing heels on power to reduce when social visibility was low (e.g., when no one was in the room). In this study, participants completed the questionnaire alone, with a female or male ‘confederate’. We asked participants to remain standing. The individuals playing the role of the confederate were kept constant within the male and female conditions respectively. Participants never interacted with the confederate, who was ostensibly reading in a corner of the room. We coded the presence of a male confederate as 1, the presence of a female confederate as -1 and the absence of confederate as 0, except noted otherwise. All results hold when coding the presence of a male or female confederate as 1 and no confederate as 0.

While wearing the shoes (flat vs. heel), participants completed a questionnaire ostensibly for another researcher which assessed two power-induced propensities: a propensity to take action (Galinsky et al. 2003) and to think abstractly (Smith and Trope 2006). First, we used two scenarios to measure action-orientation (Galinsky et al. 2003; $\alpha = .77$; see Appendix for details). Across scenarios, a decision to act was coded as 1 (0 otherwise), yielding an overall score ranging from 0 to 2 (2= two actions; 1 = one action; 0 = 0 action). Second, we assessed participants’ likelihood to think abstractly by administering the 25-items Behavioral Identification Form (BIF, Vallacher and Wegner 1989). Scores were summed ($\alpha = .84$) with higher scores indicating greater abstraction. Finally, two 7-point scales directly assessed sexiness
(“How sexy/attractive did the shoes make you feel?” anchored at 1: Not at all and 7: very much). Controlling for participants’ weight, age and height did not affect the results.

Results and Discussion

Action orientation. A 2-way ANOVA revealed a main effect of shoe style \( F(1,113)=5.90, p=.017 \). Participants wearing heels took more actions than those wearing flat shoes. There was no effect of social visibility \( F(1, 113)=1.54, p=.22 \). However, there was a marginally significant shoe style \( \times \) social visibility interaction \( F(1,113)=3.01, p=.053 \). In the presence of a confederate, participants chose a greater number of abstract descriptions when wearing heels than flat shoes regardless of the confederate’s gender (female: \( F(1,113)=6.09, p=.015 \); male: \( F(1,113)=5.39, p=.022 \)). When there was no confederate present, there was no difference across shoe conditions \( F<1; \) Figure 6.

Abstraction. A 2-way ANOVA revealed a main effect of shoe style \( F(1,113)=7.81, p<.01 \). Participants wearing heels chose a greater number of abstract descriptions than participants wearing flat shoes. There was no effect of social visibility \( F<1 \). However, there was a significant shoe style \( \times \) social visibility interaction \( F(1,113)=3.12, p=.048 \). In the presence of a confederate, participants chose a greater number of abstract descriptions when wearing heels than flat shoes regardless of the confederate’s gender (female: \( F(1,113)=7.81, p=.006 \); male: \( F(1, 113) = 5.97, p=.016 \)). When there was no confederate present, however, there was no difference across shoe conditions \( F<1, \) Figure 7.

Sexiness. A two-way ANOVA on perceived sexiness only revealed a main effect of shoe style such that participants wearing heels perceived themselves sexier \( (M=4.26, SD=1.71) \) than
participants wearing flat shoes ($M=2.91, SD=1.25; F(1,113)=23.45, p<.01$). There were no other effects or interactions (all $Fs<1$). Inclusion of sexiness as a covariate did not affect prior results.

**Power.** A two-way ANOVA on perceived power revealed both a main effect of shoe style ($F(1,113)=10.44, p=.002$) and of social visibility ($F(1,113)=8.01, p=.001$) qualified by a significant shoe style $\times$ social visibility interaction ($F(1,113)=3.23, p=.043$) such that participants felt significantly more powerful when wearing heels in the presence of a female confederate ($M=4.17, SD=2.38$) and a male confederate ($M=4.61, SD=2.21$), compared to when wearing heels without anyone in the room ($M=2.28, SD=1.09$) or when wearing flat shoes in the presence of someone else (female: $M=2.84, SD=1.29$; male: $M=2.86, SD=1.38$), or without anyone present ($M=2.37, SD=1.14$). Post-hoc tests revealed that participants felt significantly more powerful when wearing heels in the presence of a female or male confederate than any other condition (all $ps<.05$), while these two conditions did not differ from each other ($F<1$).

**Mediation.** To assess the underlying role of power and sexiness in driving the effect of heels on power propensities, we ran two moderated mediation model (Hayes 2013; model 8) on action orientation and abstraction, respectively, with shoe style (heel=1; flat=0) and social visibility (confederate=1; no confederate=0; male and female conditions aggregated within confederate). A first regression model predicting action-orientation including power, sexiness, shoe style condition, shoe style visibility as well as the shoe style $\times$ social visibility interaction only revealed a main effect of power ($B=.16, SE=.04, p<.001$) and a marginal shoe style $\times$ social visibility interaction ($B=.53, SE=1.66, p=.09$). All other terms were non-significant. The indirect effect involving power was significant (95% CI=.085 to .581), indicating successful mediation through this path, while sexiness was not (95% CI=−.029 to .152).
A second regression model predicting abstraction including power, sexiness, shoe style condition, social visibility as well as the shoe style × social visibility interaction only revealed a main effect of power ($B=1.08$, $SE=.28$, $p=.001$) and a marginal shoe style × social visibility interaction ($B=3.32$, $SE=1.99$, $p=.099$). All other terms were non-significant. In addition, the indirect effect involving power was significant (95% CI=.456 to 3.75), indicating successful mediation through this path while sexiness was not significant (95% CI=-.287 to .884).

Overall, the results reveal that wearing heels (vs. flat shoes) can increase participants’ propensity to take action and think abstractly and that these effects are driven by an increase in power as opposed to variations in perceived sexiness. Importantly, the study shows that the effect of shoe style on feelings of power is conditional on social visibility: the effect of power on action orientation and abstraction depended on the presence of a confederate (male or female).

**GENERAL DISCUSSION**

*Theoretical Contributions*

We believe the current research makes three key contributions. First, we contribute to past work documenting that stylistic choices associated with high status (Nelissen and Meijers 2011) or non-conforming clothing (Bellezza et al. 2014) can increase the value of wearers in the eyes of observers, arguably because these stylistic choices affect observers’ assumptions about wearers’ status in their social group. For instance, observers may assume that a speaker’s choice of red sneakers when teaching may stem from her privileged position in her social group (i.e., in her academic department; Bellezza et al. 2014). Novel to our work is the idea that these effects might not only stem from observers’ heightened perceptions that individuals wearing status symbols deserve greater resources simply because of their stylistic appearance. Rather, the
evidence suggests that wearing status symbols may increase the wearer’s own feelings of power, which subsequently guide her to think and behave more powerfully. We demonstrate this transformative impact of heels on the wearer’s psychological feelings and behaviors of high power across its two hallmarks susceptible to make wearers more successful in interpersonal interactions: the propensity to act and to think abstractly. This transfer (of status to power through style) may thus help explain how high status transforms individuals to gain or preserve their influence in social contexts. Notably, the evidence suggests that this transfer is limited to social contexts and reduced in contexts whether the status enhancer is less visible to others. Such a moderating effect (of social visibility) suggests that this transfer is not simply a self-signal (where wearing a status symbol acts as a power prime); rather, wearers may need the presence of others to transform the status value inherent in a status symbol into a source of power.

Second, our results contribute to the literature on style (Godart 2018) and fashion (Aspers and Godart 2013; Davis, 1992; Tulloch 2010) by delineating how consumer stylistic choices in footwear can influence their behavior. Notably, the result that the desire for shoe styles associated with status value is tied to social presence is consistent with recent findings that consumers’ brain response to luxury products (i.e., with high emotional value) but not mundane ones (with low emotional value) is higher when participants are with another person, compared to when alone (Pozharliev et al. 2015). Similarly, one may thus speculate that social (vs. individual) evaluations of different stylistic options subtly magnifies the positive affect associated with options that are associated with status value. In addition, speaking to past efforts to model the market of positional goods (e.g., Kuksov and Xie 2012; Podolny 2005 and rise and fall of fashion cycles (Yoganarasimhan 2017), the current findings suggest that variations in consumer power can alter the desire for and ultimately the purchase of specific styles tainted
with high status value such as heels in footwear. In particular, chronic (e.g., due to one’s job) or momentary (due to a social encounter) situations of powerlessness may encourage consumer demand for conspicuous stylistic options (Dubois et al. 2011; see Dubois and Ordabayeva 2015 for a review).

Finally, our study speaks to the literature on embodied cognition by delineating the interactive effect of consumer stylistic choices (i.e. heels) and contexts (i.e., visible or social context) in shaping consumers’ feelings and actions. Previous work shows that wearing clothes associated with a particular domain can increase motivation and performance – a phenomenon coined enclothed cognition involving the co-occurrence of two independent factors: the symbolic meaning of the clothes and the physical experience of wearing them (Adam and Galinsky 2012). Our work extends findings in the domain of rank regulation by showing that wearing clothes in one subdomain of rank regulation (status) can increase performance in areas associated with another subdomain (power). This transference between power and status is especially interesting as individuals can experience inconsistencies between their level of status and their level of power (i.e., high-status/low-power and low-status/high-power; Magee and Galinsky 2008). Our results suggest that individuals could perhaps use status symbols to compensate for or counterbalance such inconsistencies.

Limitations and future research

Our research presents several limitations which constitute exciting avenues for future work. First, it is worth noting that our experimental paradigms focused on a single heel height (2.75 inches). While this experimental choice responds to a desire to describe the effect of heels in everyday situations, it was also imposed by the difficulty of using shoes with identical visual
appearance yet differing in height (e.g., flat, moderate, high). Whether the documented effects would hold with higher heels remains unknown. On the one hand, one could predict that higher heels might strengthen even further this shoe style’s status moniker as evidenced by the focus of media on this subcategory and thus trigger even greater power propensities than that observed with the heels used in our experiments. On the other, higher heels may reveal the fragility of the wearer or make her unstable, hence counter the wearer’s feelings of power and thus weaken the effects. Therefore, future research could examine the extent to which wearing higher heels may affect the effect of consumer stylistic choices on power propensities.

Second, although we measured and controlled for participants’ actual height, we did not assess perceived height. As noted earlier, individuals hold tight associations between height and power or dominance concepts (Giessner and Schubert 2007; Schubert 2005) which can influence their judgments. For instance, referees are more likely to attribute an ambiguous foul to the taller of two players during a soccer match (van Quaquebeke and Giessner 2010). Ironically in our studies, observers viewed individuals wearing heels (vs. flat shoes) as having more status but not more power (Study 1; perhaps because the stimuli featured medium-sized heels). Despite the lack of link between height and power among observers, unknown is the extent to which the observed increase in feelings and behaviors of high power may have stemmed from a self-perceived increase in height, even if minimal. Given recent research suggesting that taller men and women run for leadership positions more frequently (Murray and Schmitz 2011) and taller candidates garner higher percentages of the popular vote in the US (Stulp, Abraham, Verhulst and Pollet 2013), future research could further investigate the interplay between heels, self-perceived height and power.
Third, our studies involved paradigms when participants wore shoes for a few minutes, and thus feelings of discomfort did not have time to emerge, whereas in reality, discomfort and pain may emerge with wearing heels. High heels are estimated to cost the British economy £260 million each year due to absence from work tied to wearing high heels (Criddle et al. 2016). Given recent findings that economic insecurity increases physical pain (Chou et al. 2016), one possibility is that the effect of wearing heels might be reduced for chronically or situationally powerless individuals. Alternatively, the feelings of pain might induce a feeling of powerlessness and thus counter the effect of heels on power and reduce or even reverse the current effects.

Coda

French designer Christian Louboutin once declared, “It's more about an attitude. High heels empower women in a way.” Our findings both validate and qualify his perspective. First, they suggest his intuition applies to regular heels and stems from the stylistic choice of footwear as a status symbol. Second, they suggest that the effect of consumer stylistic choices is not invariant but instead depends on their social visibility.
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FIGURES

Figure 1: US search rates for “heels,” “pumps,” “slides,” and “sneakers” (2008-2018; Google shopping searches)

Figure 2: US search rates for “heels” and “fashion show” (2008-2018; Google Web searches)

Note: Google Trends (www.googletrends.com) provides relative search rates for any word over a period (normalized to 100; Stephens-Davidowitz and Varian 2014).
*Figure 3*: Shoes used (sample), Studies 1 and 3

*Figure 4*: Perceived power and perceived status as a function of shoe style, Study 1

*Figure 5*: Choice set, Study 2
**Figure 6.** Action-orientation score as a function of shoe style and social visibility, Study 3

**Figure 7.** Abstraction score as a function of shoe style and social visibility, Study 3
APPENDIX

Scenarios used, Study 3

Scenario 1

Imagine the following scenario. You are at Vegas with a couple of your friends and you decide to try your luck at the black jack table. On the second hand that you play you bet $20 and you are confronted with the following situation. As typically happens, the dealer deals you two cards face down and deals himself one card face down and one card face up. The face up card for the dealer is a 10. Your two cards total 16. The rules of the game dictate that whoever is closest to 21 without going over 21 (or busting) wins the hand. The dealer asks, "Do you want to hit [i.e., take a card]. You think back to the books you read about black jack and what they said about this particular situation (when your hand totals 16 and the dealer's face up card is a 10) and come to conclusion that it is a toss up whether taking a card or standing (not taking a card) gives you better mathematical odds of winning. The dealer looks at you says again, "Do you want to hit?"

Do you take a card?

1= Yes

0= No

Scenario 2

Consider the following scenario. You are a member of a three-person debate team and you are in the state finals. It has been a long and grueling season and you find yourself in the final round. The protocol of the final round is that each team's name is put into a hat and one name is drawn from that hat. The team whose name is drawn gets to decide whether to go first or second. Your team's name is drawn. The other two members of your team are in disagreement over whether to go first or second. One wishes to go first and the other thinks it is better to go second. The person who wants to go first thinks it is best because it allows your team to frame the debate. The other person thinks going second is better because it allows you to rebut specific arguments the other side makes. The choice of whether your team goes first or second is up to you.

1= I choose to make the first argument (i.e., go first).

0= I choose to make the rebuttal argument (i.e., go second)