Article



# Why Does Social Class Affect Subjective Well-Being? The Role of Status and **Power**

Personality and Social Psychology Bulletin 2020, Vol. 46(3) 331-348 © 2019 by the Society for Personality and Social Psychology, Inc Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/0146167219853841 journals.sagepub.com/home/pspb

(\$)SAGE

Siyu Yu<sup>1</sup> and Steven L. Blader<sup>1</sup>

#### **Abstract**

The link between social class and subjective well-being (SWB) has been an important topic of inquiry, with broad implications for understanding the psychology of social class and the determinants of SWB. Prior research on this topic has focused primarily on the extent to which social class affects SWB and the factors that moderate that impact. We extend prior work by examining the concerns that account for why social class shapes SWB. In particular, we examine the role of status and power in mediating the impact of one's social class on one's SWB. Across five studies, we theorize and find that status mediates the impact of social class on SWB and, moreover, that status is a stronger mediator of this link than is power. Overall, these studies advance scholarly research on the psychology of social hierarchy by clarifying the interplay between social class, status, and power in relation to SWB.

#### **Keywords**

social class, status, power, subjective well-being

Received August 31, 2018; revision accepted April 12, 2019

Membership has its privileges, and few memberships afford as many privileges as being among those who hold a high social class position (i.e., ranking highly in terms of wealth, occupational prestige, and education; Kraus, Piff, & Keltner, 2009). Indeed, high-social-class individuals enjoy a wide range of advantages (e.g., greater influence, better opportunities, health, etc.; Akinola & Mendes, 2014). Given these substantial privileges, it seems likely that high-social-class individuals—that is, those living "the good life"—would experience substantially greater subjective well-being (SWB). However, although higher social class is associated with enhanced SWB (Adler, Epel, Castellazzo, & Ickovics, 2000; Anderson, Kraus, & Galinsky, 2012; Diener, Ng, Harter, & Arora, 2010), this effect is often weaker and less consistent than might be expected (e.g., Frey & Stutzer, 2000; Kahneman & Deaton, 2010). This is an important paradox to investigate, especially since doing so may deepen our understanding of the psychology of social class and the dynamics of SWB—a significant psychological outcome in its own right and a key determinant of other important downstream outcomes (e.g., Wright & Cropanzano, 2000).

Prior efforts to understand this paradox have tended to investigate factors that modulate the impact of social class on SWB. For instance, the link between social class and SWB is stronger in relation to individuals' subjective judgments of their own social class as compared to objective indicators of their social-class position (e.g., Adler et al., 2000). Other research has found that SWB is more strongly tied to individuals' sense of their social class relative to others in their local social environment rather than in the broader societal context, as the former invokes greater personal meaning and psychological significance (Adler et al., 2000; Luttmer, 2005). These and other related findings highlight that the impact of social class on SWB is primarily a psychological phenomenon, driven by the psychological experience and significance of one's social class position (Adler et al., 2000; Anderson, Kraus, & Galinsky, 2012). As such, to understand this phenomenon, it is important to identify the underlying psychological concerns and mechanisms that account for the impact of social class on SWB—that is, it is important to understand why social class affects SWB. Yet prior research has not extensively considered this issue but, instead, has tended to focus on the magnitude of social class's impact on SWB. The current research addresses this gap by investigating the psychological dynamics of status and power as mechanisms that account for the impact of social class on SWB.

<sup>1</sup>New York University, New York City, USA

#### **Corresponding Author:**

Siyu Yu, Stern School of Business, New York University, 44 West 4th Street, New York, NY 10012, USA. Email: syu2@stern.nyu.edu

# Psychological Mechanisms of Social Class: Status and Power

Social class is a complex construct since it is manifest in a wide range of signals, such as wealth, education, and occupational prestige (Dutton & Levine, 1989, p. 30); has pervasive effects on how people think, feel, and behave (e.g., Bowman & Nisbett, 2009; Kraus et al., 2009); and corresponds to multiple forms of hierarchical differentiation among individuals. Although it is often conceptualized as a singular construct, this complexity highlights the importance of unpacking social class and examining its constituent elements to gain a clear understanding of its implications and the specific reasons for them.

Two primary, distinct elements that social class relates to are status and power (Belmi & Laurin, 2016; Dubois, Rucker, & Galinsky, 2015; Fiske, 2010). Social class both reflects and shapes the relative status and power that individuals are likely to possess within their groups. Status refers to the respect, prestige, and admiration that an individual has in the eyes of others, while power refers to the extent to which an individual possesses and controls valued resources (Blader & Chen, 2012; Fiske, 2010; Magee & Galinsky, 2008). Status and power hierarchies are spontaneous, ubiquitous, and highly consequential phenomena in nearly all collectives and social groups (Blader & Chen, 2012). Indeed, status and power are fundamental bases of hierarchical differentiation among individuals (Magee & Galinsky, 2008) and are highly impactful psychological constructs (e.g., Blader & Chen, 2012; Magee & Galinsky, 2008). Although status and power often covary, they are distinct and differ in the psychological concerns and needs they address; the processes through which they operate; and the reactions they elicit (e.g., Blader & Chen, 2012; Fast, Halevy, & Galinsky, 2012; Hays & Bendersky, 2015).

Social class invokes the psychology of status because it serves as a diffuse status characteristic (Berger, Cohen, & Zelditch, 1972), such that higher-social-class individuals are consensually regarded as more competent, worthy, and industrious than their lower-social-class counterparts (Fiske, Cuddy, Glick, & Xu, 2002). These social judgments are primary determinants of the status that individuals confer to one another. As a result, high- (vs. low-) social-class individuals are bestowed greater status (Berger et al., 1972). Notably, this can occur even upon initial contact and early socialization within a group because people often utilize social class as a heuristic cue that signals the status that a given individual deserves (Anderson et al., 2012). Social class may also shape individuals' sense of their own status. That is, social class likely shapes individuals' expectations and self-perceived status, such that higher-social-class individuals both expect and perceive themselves to hold high status. As a result, they may be prone to inflated judgments of statusrelevant cues from others (Pettit & Sivanathan, 2012). These associations between social class and status tend to be

confirmed and reinforced in the judgments, behaviors, and social interactions that unfold among individuals and within groups (Correll & Ridgeway, 2006), which is one way in which the dynamics of social hierarchy tend to be self-perpetuating (Magee & Galinsky, 2008). Overall, higher-social-class individuals are likely to expect, experience, and internalize a sense of enjoying high status in their social relations and groups.

Social class invokes the psychology of power (Anderson, John, & Keltner, 2012; Dubois et al., 2015; Kraus et al., 2009) because differences in social class are inherently tied to differences in the resources that one possesses and controls, a defining element of power (Keltner, Gruenfeld, & Anderson, 2003; Magee & Galinsky, 2008). Indeed, high-(vs. low-) social-class individuals are more likely to possess and attain economic resources (Kraus, Piff, & Keltner, 2011), access to opportunities (Snibbe & Markus, 2005), and highranked formal roles in which they evaluate others and allocate resources (Li, Arvey, & Song, 2011). Moreover, beyond the link between social class and objective resources under one's control, social class is also likely to exert an independent impact on individuals' subjective sense of power. This is because social class shapes several key drivers of self-perceived power (Tost, 2015), such as one's sense of independence, autonomy, and control in social encounters (Keltner et al., 2003; Lammers, Stoker, Rink, & Galinsky, 2016; Snibbe & Markus, 2005). As with status, the selfperpetuating dynamics of social hierarchy (Magee & Galinsky, 2008) likely reinforce and amplify the links between one's social class and the power one perceives and possesses.

Overall, these insights explain why social class is likely to affect the status and power that individuals attain and perceive in their social relations and groups and, thus, why social class is likely to invoke and shape the distinct psychological dynamics of status and power. In turn, we extend this insight and predict that the psychological dynamics of status and power account, at least partially, for the impact of social class on SWB. Although some prior research has likewise proposed that social class, status, and power are conceptually distinct from one another (e.g., Anderson et al., 2012; Belmi & Laurin, 2016; Dubois et al., 2015), the pattern of causal linkages among them have not been extensively theorized or examined nor has prior research conceptualized or tested status and power as distinct explanatory mechanisms that help account for the consequences of social class. From an empirical standpoint, one notable exception is Study 3 of Dubois et al. (2015) because the findings of this study indicate that power—but not status—mediated the impact of social class on unethical behavior. However, the dynamics of unethical behavior are quite dissimilar to those of SWB, particularly because unethical behavior tends to be grounded in selffocused dynamics that are also associated with power but not with status. This pattern does not apply to SWB, and, thus, this prior study does not directly inform our consideration of status and power as dual mediating mechanisms underlying

the impact of social class on SWB (or, for that matter, other outcomes besides unethical behavior).

# Social Class, Status, Power, and SWB

As noted, prior research on the impact of social class on SWB has primarily examined the magnitude of this effect. One reason that social class is likely to affect SWB is because it addresses some fundamental psychological needs, such as people's needs for relatedness, autonomy, and mastery (Diener et al., 2010; Ryan & Deci, 2000). We draw upon and extend this premise, theorizing that status and power mediate the impact of social class on SWB because of the fundamental psychological needs related to, and potentially addressed by, each of them. In other words, we theorize that status and power have distinct implications for the fulfillment of fundamental psychological needs and that these implications underlie the second stage of our predicted mediation pattern (i.e., for the impact of status and power on SWB).

In terms of status, the degree of status that others confer on an individual impacts the extent to which that individual's belongingness, relatedness, and status and respect needs are likely to be fulfilled (Anderson, Hildreth, & Howland, 2015; Baumeister & Leary, 1995; Ryan & Deci, 2000; Tay & Diener, 2011). High status contributes to the fulfillment of these needs because it shapes the nature of one's social interactions, such that high-status individuals experience greater acceptance (Blau, 1964), stronger voluntary deference (Berger et al., 1972), and more favorable treatment from others (Henrich & Gil-White, 2001). Overall, high status individuals are regarded as more socially attractive and are more likely to be sought out by others (Henrich & Gil-White, 2010). In addition to fulfilling individuals' social and relational needs, high status may also address individuals' mastery and competence needs given that perceived competence is a key basis for status conferral and others often look to high-status individuals for advice or information (Henrich & Gil-White, 2010). Notably, social and mastery needs (i.e., the needs related to status) are critical determinants of SWB (Ryan & Deci, 2000; Tay & Diener, 2011) and, thus, we theorize that high status enhances SWB because it contributes to the fulfillment of psychological needs that are key antecedents of high SWB.

In contrast, power affects the fulfillment of autonomy and control needs (Morris & Snyder, 1979), which are also fundamental psychological needs that shape SWB (Tay & Diener, 2011). High power fulfills these needs because it enables people to follow their own will (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008), act idiosyncratically (Guinote, Judd, & Brauer, 2002), and resist others' influence (Galinsky et al., 2008). Indeed, high power involves control over others as well as a sense of autonomy and being uncontrolled by others (Fast, Gruenfeld, Sivanathan, & Galinsky, 2009; Lammers et al., 2016). This aspect of power, and its potential implications for SWB, are

reflected in evidence that high power enhances individuals' sense of authenticity and, subsequently, their SWB (Kifer, Heller, Perunovic, & Galinsky, 2013). However, other aspects of the psychology of high power may exert opposing, negative effects on SWB. As high power enhances social distance (Lammers, Galinsky, Gordijn, & Otten, 2012; Magee & Smith, 2013) and reduces social attentiveness and engagement (Blader, Shirako, & Chen, 2016; Galinsky, Magee, Inesi, & Gruenfeld, 2006; Tost, Gino, & Larrick, 2013), it may diminish one's sense of social support (Reis, Sheldon, Gable, & Ryan, 1995) and social connectedness. Given the important role of one's social relations in shaping her or his SWB, these consequences of power may have negative effects on SWB. Indeed, prior research finds that the beneficial effect of power on SWB is reversed in collectivistic contexts due to prioritization of one's interdependence and connections to others (Datu & Reyes, 2015). However, some recent work proposes an alternative perspective, as it suggests that the adverse impact of high power on one's social relations may not subsequently undermine one's SWB because high power also diminishes the strength of one's relatedness needs in the first place (Waytz, Chou, Magee, & Galinsky, 2015). Overall, we posit that power is likely to enhance SWB because it addresses people's psychological need for autonomy and control, though the magnitude of this effect may depend on other countervailing dynamics also related to power.

Although we predict that both status and power mediate the effect of social class on SWB, we further predict that the indirect effect of status will be relatively stronger than that of power. This prediction is based on extensive evidence that the psychological needs associated with status (i.e., respect, relatedness, and mastery needs) have a stronger impact on SWB than the needs associated with power (i.e., autonomy, control needs) (Tay & Diener, 2011). Moreover, as noted above, the overall impact of power on SWB may be mitigated by the diminishing effect of power on perceived social support and relatedness. Status is also likely to exert a stronger indirect effect because it is voluntarily and continually conferred based on one's personal characteristics and behaviors and, thus, reflects others' voluntary, highly personalized assessment of one's value. In contrast, high power is largely a signal of the value that others place on the resources under one's control or the formal position that one holds (Yukl & Falbe, 1991) and, as such, is relatively less reflective of the person. Status, therefore, has greater self-relevance than power does, thus imbuing status with greater psychological significance and enhancing its relative impact on SWB.

Overall, we predict that status and power represent distinct, parallel pathways that account for the impact of social class on SWB, but that status has a relatively stronger indirect effect than power. Some prior theorizing and research has acknowledged social class, status, and/or power as distinct elements of social hierarchy (Fiske, 2010; Magee & Galinsky, 2008). We extend that work by considering the

causal relationships among these bases of hierarchical differentiation to understand why and how social class shapes downstream outcomes such as SWB. For instance, our investigation complements and extends prior work by Anderson et al. (2012) that distinguishes social class from status to compare their relative impact on SWB. Their focus on the extent to which social class versus status shapes SWB differs from our emphasis on the underlying mechanisms that explain why social class shapes SWB (and, thus, our investigation of the causal relationships among social class, status, power, and SWB). We also extend this prior work by operationalizing both status and power in relation to local social comparisons, enabling us to examine the impact of these hierarchical bases apart from the local dominance effect (Alicke, Zell, & Bloom, 2010). This is important because Anderson et al. (2012) attribute their findings to the local dominance effect, theorizing that status exerts a relatively stronger impact on SWB because it invokes more proximal, localized social comparisons than does social class. However, from a conceptual standpoint, local comparisons are not unique to status and can also be examined in relation to power (Senik, 2009). By decoupling the basis of hierarchical differentiation from social comparison levels, our investigation isolates and examines their respective effects on SWB.

#### **Current Studies**

Studies 1a and 1b investigated our predictions using large-scale archival data from the United States and Japan, respectively, focusing on the impact of social class on SWB through people's status and power at work. Studies 2 and 3 examined our predictions in relation to status and power across various life domains and groups. Study 4 examined whether individual differences in the strength of the psychological needs addressed by status or power moderate the indirect effects of status and power.

# Studies Ia and Ib

Studies 1a and 1b utilized longitudinal data from large-scale surveys conducted in the United States (Study 1a) and Japan (Study 1b), enabling us to examine the cross-national validity and generalizability of our predictions. Both studies examined the status and power that individuals experience at work, a highly relevant domain for our examination given that social class critically shapes people's formal and informal experiences and opportunities at work (Barling & Weatherhead, 2016) and, moreover, the work domain has significant implications for SWB (Beehr, 1995).

# Study I a

Study 1a examined data from the Midlife in the United States survey (MIDUS), a three-wave longitudinal study conducted by the University of Wisconsin. The MIDUS investigates the role of behavioral, psychological, and social factors in understanding physical and psychological well-being and has been widely examined in prior SWB research (e.g., Curhan, Levine, Markus, & Kitayama Ryff, 2014).

Sample. The sample consisted of all currently employed MIDUS respondents that participated in all three waves of the survey and completed all relevant measures (N=1,658; 51.4% female). We utilized data from different time periods for each stage of our predicted causal sequence: the independent variable (social class) from Wave 1, mediators (status, power) from Wave 2, and the dependent variable (SWB) from Wave 3. This lagged effect approach attenuates the potential impact of common method bias on our findings (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). We further verified our findings by testing our predictions within each of the three waves (pp. 1-6 in the Supplementary Materials).

Measures. To assess social class, we utilized data from Wave 1 of the MIDUS dataset to develop a composite measure based on the three key elements that conceptually define social class: income, education, and occupational prestige (Dutton & Levine, 1989). To assess income, respondents indicated their income over the previous year (1 = Less than \$0/loss to 31 = \$100,000 or more). To assess education, respondents indicated the highest grade of schooling they had completed  $(1 = No \ school/some)$ grade school to 12 = Professional degrees). Occupational prestige was assessed according to an occupational prestige index included in the MIDUS dataset, reflecting the occupational prestige score of respondents' self-reported occupation (higher values indicate higher occupational prestige—for example, Cashiers = 21.41, Physicians = 80.53). Similar to prior research (e.g., Kraus, Horberg, Goetz, & Keltner, 2011), we developed a composite measure of social class by averaging the standardized values of these three indicators.

Our status index, from Wave 2, assessed the extent to which respondents feel that their coworkers respect them for the work they do (1 = a lot to 4 = not at all); reverse-coded) since respect bestowed due to one's contributions to a group is a defining, central element of status (Anderson et al., 2012; Blader & Yu, 2017). Our power index, also from Wave 2, reflected respondents' reports of whether they hold a formal managerial role at work (23.58%, N = 391, of respondents indicated that they do). This is consistent with prior power research, which often operationalizes power in terms of formal roles (e.g., managerial roles) that involve a high degree of resource control and opportunities to evaluate others (e.g., Anderson & Berdahl, 2002; Galinsky, Gruenfeld, & Magee, 2003).

Our index of SWB, from Wave 3, examined two fundamental components and common operationalizations of SWB (Luhmann, Hofmann, Eid, & Lucas, 2012): affect and

Table I.	Descriptive :	Statistics and	Correlations,	Study Ia	(N = 1)	1,658).
----------	---------------	----------------	---------------	----------	---------	---------

	М	SD	1	2	3	4	5	6	7	8	9	10	П
I. Social Class (Wave I)	0.28	0.74	_										
2. Status (Wave 2)	3.52	0.72	.12**	_									
3. Power (Wave 2)	0.24	0.42	.20**	.04									
4. Affect (Wave 3)	2.05	1.03	.10**	.25**	.02	_							
5. Life satisfaction (Wave 3)	7.64	1.26	.17**	.24**	.06*	.58**							
6. Subjective well-being composite (Wave 3)	0.13	2.34	.14**	.27**	.04	.94**	.81**	_					
7. Male	0.49	0.50	.27**	02	.14**	.03	.04	.04	_				
8. White	0.95	0.21	.04	.01	01	05	02	04	.06*	_			
9. Age (Wave 2)	52.03	9.46	.02	.11**	03	.18**	.17**	.20**	.06*	.00	_		
10. Married (Wave 2)	0.74	0.44	.05	.04	.03	.10**	.17**	.14**	.14**	.09**	.01	_	
II. Age (Wave 3)	61.12	9.47	.02	.11**	03	.18**	.17**	.20**	.06	.00	1.00**	.01	_
12. Married (Wave 3)	0.71	0.45	.08**	.08**	.02	.11**	.20**	.16**	.17**	.11**	06*	.71**	06*

<sup>\*</sup>p < .05. \*\*p < .01, two-tailed tests.

life satisfaction. The affect index, consistent with the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) and the affect measure developed by Mroczek and Kolarz (1998), asked respondents to indicate how frequently they experienced a variety of positive (10 items; for example, enthusiastic, cheerful;  $\alpha = .93$ ) and negative (11 items; for example, upset, nervous;  $\alpha =$ .89) emotions over the previous 2 weeks ( $1 = all \ of \ the \ time$ to 5 = none of the time). As in prior studies, we created a composite affect measure by subtracting negative affect (NA) from positive affect (PA) (e.g., Sheldon & Elliot, 1999). The life satisfaction index assessed respondents? level of satisfaction with regard to different foci (6-item, including work, finances, and overall life satisfaction, Prenda & Lachman, 2001; 0 = worst possible to 10 = bestpossible;  $\alpha = .70$ ). As in prior research, we calculated a composite SWB measure by summing the standardized life-satisfaction and PA scores and then subtracting the standardized NA score (Anderson et al., 2012; Kifer et al.,  $2013).^{1}$ 

To enhance the validity of our conclusions, we followed prior related research (e.g., Curhan et al., 2014; Inaba et al., 2005) and controlled for several demographic variables that may covary with SWB and/or one's social hierarchical position and, thus potentially inflate our predicted relationships. Specifically, we controlled for age, gender (1 = male, 0 = female), ethnicity (1 = White, 0 = others), and marital status (1 = married, 0 = not married). Control variables were from the same wave as the outcome measure in each respective analysis.

# Results

Descriptive statistics and correlations are presented in Table 1.

In testing our predictions, we conducted ordinary least squares (OLS) regressions (logistic regression when power

is the outcome variable, given its dichotomous nature). We first examined the association between social class and SWB. As Table 2 indicates, social class was significantly associated with affect, Model 3: b=0.13, t(1652)=3.77, p<0.001, 95% confidence interval (CI) = [0.06, 0.20]; life satisfaction, Model 5: b=0.28, t(1652)=6.82, p<0.001, 95% CI = [0.20, 0.36]; and SWB composite, Model 7: b=0.43, t(1652)=5.56, p<0.01, 95% CI = [0.28, 0.58].

We then examined our prediction that status and power mediate the impact of social class on SWB. First, as predicted, we found that social class was significantly associated with status, see Table 2, Model 1: b = 0.12, t(1652) =5.14, p < .001, 95% CI = [0.08, 0.17], and power (Model 2: b = 1.82, z = 7.09, p < .001, 95% CI = [1.55, 2.15]Second, we examined the indirect effects of status and power on SWB separately, testing the indirect effect of each without accounting for the impact of the other (i.e., as single mediators) via a bootstrapping analysis with 5,000 resampling at the bias-corrected 95% CIs (this approach applies to all tests of indirect effects presented below), with the binary mediation command in STATA14 where both binary and continuous mediators are allowed. Notably, these analyses revealed a significant indirect effect of status but not power (Appendix A) across all SWB indices.

Third, we examined our primary prediction by testing status and power as dual, simultaneous mediators. This analysis revealed significant indirect effects of status on affect (.016, .042), life satisfaction (.014, .036), and SWB composite (.017, .043). However, the indirect effects of power were insignificant for affect (-.013, .010), life satisfaction (-.004, .019), and SWB composite (-.009, .014). The indirect effect of status was significantly greater than that of power on affect (.014, .046), life satisfaction (.001, .033), and SWB composite (.010, .043).

**Table 2.** Regression Results, Study Ia (N = 1,658).

	Status (Wave 2)	Power (Wave 2)	Affe (Wav			sfaction ve 3)	SWB compo	•
Variables	Model I	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Social class (Wave I)	0.12** (0.02)	1.82** (0.15)	0.13** (0.03)	0.09** (0.03)	0.28** (0.04)	0.23** (0.04)	0.43** (0.08)	0.33** (0.08)
Status (Wave 2)	(*** )	(** *)	(1111)	0.32**	(*** )	0.33**	(*****)	0.74** (0.08)
Power (Wave 2)				-0.01 <sup>°</sup> (0.06)		0.09 <sup>°</sup> (0.07)		0.05 (0.13)
Male	-0.09* (0.04)	1.64** (0.20)	-0.05 (0.05)	-0.01 (0.05)	-0.11 <sup>†</sup> (0.06)	-0.08 (0.06)	-0.15 (0.12)	-0.08 (0.11)
White	0.02 (0.08)	0.71 (0.20)	-0.32** (0.12)	-0.32** (0.12)	-0.31* (0.14)	-0.30* (0.14)	-0.75** (0.26)	-0.75** (0.26)
Age (Wave 2)	0.01** (0.00)	0.99 (0.01)	, ,	, ,	, ,	, ,	, ,	, ,
Married (Wave 2)	0.07 <sup>†</sup> (0.04)	1.09 (0.15)						
Age (Wave 3)	, ,	, ,	0.02** (0.00)	0.02** (0.00)	0.02** (0.00)	0.02** (0.00)	0.05** (0.01)	0.05** (0.01)
Married (Wave 3)			0.29***	0.24** (0.05)	0.57** (0.07)	0.52** (0.07)	0.89** (0.12)	0.78** (0.12)
Constant	3.02** (0.13)	0.42* (0.18)	0.87** (0.20)	-0.04 (0.22)	6.03** (0.24)	5.05** (0.26)	-2.99** (0.44)	-5.16** (0.48)
$R^2$	.03	.05	.06	.11	.10	.13	.09	.14

Note. Models 1, 4-8 are OLS regressions with unstandardized coefficients. Model 2 is logistic regression with odd ratios. Standard errors in parentheses. SWB = subjective well-being; OLS = ordinary least squares.

# Study 1b

Sample. Study 1b utilized data from the Midlife in Japan survey (MIDJA), a two-wave longitudinal study conducted in Japan by the University of Wisconsin. These data provide an opportunity to examine the cross-national generalizability of our findings from Study 1a (though we do not have a priori predictions of such differences). Our sample consists of Japanese working adults that participated in both waves of the MIDJA and who completed all of the measures relevant to our study (N = 461; 47.1% female). We assessed social class, status, and power in Wave 1 and SWB in Wave 2.

Measures. Social class (assessed in Wave 1) was operationalized in terms of respondents' highest completed grade of schooling (1 = 8th grade/junior high school graduate to 8 = graduate school). Although income and occupational prestige were not available in the MIDJA, education is often examined as a stand-alone indicator of social class (e.g., Curhan et al., 2014; Snibbe & Markus, 2005). Status, power (32.97%, N = 152 held a managerial position), positive affect ( $\alpha = .92$ ), negative affect ( $\alpha = .90$ ), life satisfaction ( $\alpha = .78$ ), and SWB composite measures were all identical to those in Study 1a. Status and power were assessed in Wave

1 and all SWB variables in Wave 2.<sup>2</sup> We examined the same control variables as in Study 1a, except for ethnicity, which was not assessed in the MIDJA due to Japan's ethnic homogeneity.

Results. Table 3 presents descriptive statistics and correlations. We conducted OLS regressions (logistic regression when power is the outcome variable) to test our predictions. We first examined the association between social class and SWB. As indicated in Table 4, social class did not have a main effect on any of our SWB indices. We next examined our predicted indirect effects because a significant main effect is not a prerequisite to examining indirect effects (e.g., Shrout & Bolger, 2002). We found that social class was significantly associated with status, Model 1: b = 0.06, t(456) = 3.15, p = .002, 95% CI = [0.02, 0.10], and power (Model 2: b = 1.18, z = 3.06, p = .002, 95% CI = [1.06, 1.32]). Moreover, we found significant indirect effects of status and power when examining each on its own (i.e., as single mediators; Appendix A).

We next examined the indirect effects of status and power simultaneously and found significant indirect effects of status on affect (.019, .091), life satisfaction (.016, .072), and SWB composite (.019, .091). The indirect effects of power

 $<sup>^{\</sup>dagger}p < .10. *p < .05. **p < .01, two-tailed tests.$ 

**Table 3.** Descriptive Statistics and Correlations, Study 1b (N = 461).

	М	SD	I	2	3	4	5	6	7	8	9	10
I. Social Class (Wave I)	4.83	1.99	_									
2. Status (Wave 1)	2.00	0.83	.16**									
3. Power (Wave I)	0.33	0.47	.18**	.25**								
4. Affect (Wave 2)	1.35	1.07	04	.35**	.12*	_						
5. Life satisfaction (Wave 2)	6.21	1.54	.06	.28**	.07	.61**	_					
6. Subjective well-being composite (Wave 2)	-0.06	2.36	.00	.35**	.12*	.95**	.83**	_				
7. Male	0.53	0.50	.19**	.10*	.32**	04	11*	07	_			
8. Age (Wave 1)	51.79	12.17	20**	.06	.10*	.15**	01	.10*	.06			
9. Married (Wave I)	0.72	0.45	.10*	.11*	.11*	.15**	.18**	.18**	.17**	.15**	_	
10. Age (Wave 2)	56.14	12.11	20**	.05	.10*	.15**	0I	.10*	.06	1.00**	.15**	· —
II. Married (Wave 2)	0.72	0.45	.14**	.10*	.08	.14**	.20**	.18**	.16**	.05	.88∗∗	.05

<sup>\*</sup>p < .05. \*\*p < .01, two-tailed tests.

Table 4. Regression Results, Study 1b.

	Status (Wave I)	Power (Wave I)	Aff (Wav		Life satisfacti 2)	on (Wave	SWB composite (Wave 2)	
Variables	Model I	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Social class (Wave 1)	0.06**	1.18**	-0.01	-0.04 <sup>†</sup>	0.05	0.01	0.01	-0.06
	(0.02)	(0.07)	(0.03)	(0.02)	(0.04)	(0.04)	(0.06)	(0.05)
Status (Wave 1)	,	, ,	, ,	0.44**	,	0.49**	,	0.97 <sup>*</sup> *
,				(0.06)		(80.0)		(0.13)
Power (Wave I)				0.13		0.15		0.32
( , , , , , , , , , , , , , , , , , , ,				(0.11)		(0.16)		(0.23)
Male	0.10	3.69**	-0.15	-0.23*	-0.48**	-0.57**	<b>−0.49</b> *	-0.67**
	(0.08)	(0.85)	(0.10)	(0.10)	(0.14)	(0.14)	(0.22)	(0.22)
Age (Wave 1)	0.00	1.02*	(33.3)	()	()	()	()	()
8 ( ,	(0.00)	(0.01)						
Married (Wave I)	0.14 <sup>†</sup>	1.17						
That fied (**uve 1)	(0.09)	(0.30)						
Age (Wave 2)	(5.57)	(0.00)	0.01**	0.01*	0.00	-0.00	0.02*	0.01
<b>0</b> ( )			(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)
Married (Wave 2)			0.34**	0.29**	0.75**	0.69**	`0.99 <sup>*</sup> **	0.88**
,			(0.11)	(0.10)	(0.16)	(0.15)	(0.24)	(0.23)
Constant	1.29**	0.03**	0.54 <sup>†</sup>	0.00	`5.67 <sup>*</sup> **	`5.08 <sup>*</sup> *∗	-1.66**	-2.82**
	(0.21)	(0.02)	(0.29)	(0.28)	(0.41)	(0.41)	(0.63)	(0.62)
$R^2$	.04	.11	.04	.17	.06	.14	.05	.18

Note. N=461. Models I, 4-8 are OLS regressions with unstandardized coefficients. Model 2 is logistic regression with odd ratios. Standard errors in parentheses. SWB = subjective well-being; OLS = ordinary least squares.  $^{\dagger}p < .10. *p < .05. **p < .01$ , two-tailed tests.

on affect (-.004, .036), life satisfaction (-.008, .032), and SWB composite (-.005, .033) were insignificant. The indirect effect of status was significantly greater than that of power on affect (.004, .084), life satisfaction (.001, .070), and SWB composite (.005, .086).

#### Discussion

Studies 1a and 1b support our prediction that status mediates the effect of social class on SWB across two different national contexts and in relation to objective indices of social class (which, notably, tend to have weaker associations with SWB, making it more difficult to detect indirect effects) (Adler et al., 2000). These studies also support our prediction that the indirect effect of status is stronger than that of power. However, we found no significant indirect effect of power when simultaneously accounting for status. This may reflect the rationale that led us to expect a relatively weaker indirect effect for power, though to a greater extent than we anticipated. Alternatively, these results may be due to weaker statistical

power of our power index because it is a dichotomous variable, and a relatively small proportion of our respondents reported holding a higher-power position. Although our power index was consistent with much of the prior research (e.g., Anderson & Berdahl, 2002; Galinsky et al., 2003), this operationalization may have affected our findings, and, therefore, we adopted a different approach to operationalizing power in our subsequent studies.

Although the findings of Studies 1a and 1b are informative, particularly because they are based on archival datasets that include a wide range of respondents, they are also somewhat preliminary. First, although our indices of social class, status, and power were all consistent with prior research, they were single-item indices. Second, differences in the nature of our (subjective) status and (objective) power indices potentially complicated our comparison and interpretation of their relative effects. Third, our status and power indices were somewhat limited because they focused only on the work domain rather than on a wider range of domains. We address these shortcomings in our subsequent studies.

# Study 2: Social Class, Status, Power, and SWB

#### Method

Sample. We recruited 350 U.S. adult participants via Amazon Mechanical Turk (44.9% female;  $M_{\rm age} = 36.69$ ,  $SD_{\rm age} = 10.5$ ). In this and the following studies, we incorporated the attention check recommended by Mason and Suri (2012), instructing participants to select a specific answer that did not apply to the question provided. Twenty-five participants failed the check, resulting in a sample of 325 participants.

Measures. Based on prior research (e.g., Kraus et al., 2009), the study assessed social class by asking participants to indicate their own standing on a 10-rung ladder representing the range of income, education, and occupation in the United States.

Existing measures of status and power tend to conflate status, power, and/or other hierarchy-related factors (e.g., influence—a downstream outcome of status and power; Blader & Chen, 2012). These confounds are especially problematic given our focus on the distinct indirect effects of status and power. Thus, we developed measures that avoid these confounds and isolate the prevailing conceptualizations of these constructs (e.g., Blader & Chen, 2012; Hays & Bendersky, 2015), in part by drawing on manipulation-check measures of experimentally primed status and/or power (e.g., Galinsky et al., 2003; Pettit & Sivanathan, 2012). We provided definitions of status and power in the instructions that preceded our status and power scales.

Consistent with prior research that has examined individuals' status and power across social contexts (e.g., Anderson et al., 2012), we instructed participants to consider the status and power they hold in their various groups (e.g., their work groups, friends, and volunteer organizations) and to reflect on their overall feelings when considering their status and power across these groups. Status (6-item; for example, "to what extent do you feel highly respected?") and power (6-item; for example, "to what extent do you control significant resources?") (Appendix B)  $(1 = not \ at \ all \ to \ 7 = a \ lot)$ . We counterbalanced the order of these scales in the survey. Both scales reflected high internal reliability ( $\alpha_{\text{status}} = .96$ ,  $\alpha_{\text{power}} = .95$ ).

We assessed three key components of SWB: positive affect, happiness, and life satisfaction. Positive affect was measured by five items from the PANAS short-form (Watson et al., 1988) and five prototypical pleasant emotions (e.g., elated) (Russell & Barrett, 1999) ( $\alpha = .88$ ). Happiness was assessed by a one-item measure ("In general, how happy or unhappy do you usually feel?"  $0 = extremely \ unhappy$  to  $10 = extremely \ happy$ ) (Ryff & Keyes, 1995), as was life satisfaction ("I am satisfied with my life."  $1 = strongly \ disagree$  to  $7 = strongly \ agree$ ) (Ryff & Keyes, 1995). We created an SWB composite by standardizing and averaging affect, happiness, and life satisfaction.

Control variables. We controlled for participants' age, gender (1 = male, 0 = female), and ethnicity (1 = White, 0 = others).

# Results and Discussion

Descriptive statistics and correlations are presented in Table 5. Confirmatory factor analyses verified the distinctiveness of our status and power measures—a two-factor model distinguishing between status and power had good fit overall,  $\chi^2 = 119.705$ , p < .001, comparative fit index (CFI) = .98, root mean square error approximation (RMSEA) = .06, standardized root mean square residual (SRMR) = .03, and was significantly better than the one-factor model ( $\chi^2 = 1.328.79$ , p < .001, CFI = .69, RMSEA = .26, SRMR = .15;  $\Delta \chi^2 = 1.209.87$ , p < .001).

We conducted OLS regressions to test our predictions. We first examined the effect of social class on SWB. As Table 6 indicates, social class was significantly associated with positive affect, Model 3: b=0.10, t(320)=4.28, p<.001, 95% CI = [0.05, 0.14], happiness, Model 5: b=0.41, t(320)=6.20, p<.001, 95% CI = [0.28, 0.54], life satisfaction, Model 7: b=0.39, t(320)=7.72, p<.001, 95% CI = [0.29, 0.49], and SWB composite, Model 9: b=0.20, t(320)=6.86, p<.001, 95% CI = [0.15, 0.26]. Moreover, social class was also associated with status, Model 1: b=0.24, t(320)=6.10, p<.001, 95% CI = [0.16, 0.31], and power, Model 2: b=0.34, t(320)=7.72, p<.001, 95% CI = [0.25, 0.43].

When examining status and power as single mediators, we found significant indirect effects on social class for all

**Table 5.** Descriptive Statistics and Correlations, Study 2 (N = 325).

	М	SD	1	2	3	4	5	6	7	8	9
1. Social Class	5.08	1.56	_	,							
2. Status	4.80	1.16	.33**	_							
3. Power	3.68	1.34	.40**	.6I**	_						
4. Life satisfaction	5.01	1.55	.40**	.39**	.33**	_					
5. Positive affect	3.41	0.65	.24**	.37**	.22**	.62**	_				
6. Happiness	7.96	1.95	.33**	.44**	.26**	.76**	.68**	_			
7. Subjective well-being composite	0.00	0.89	.36**	.45**	.30**	.89**	.86**	.92**			
8. Male	0.54	0.50	02	0I	.03	08	10	06	09	_	
9. White	0.85	0.36	0I	08	06	.04	05	.01	.00	04	_
IO. Age	36.79	10.85	.05	.08	0I	.02	.06	.04	.04	08	.16**

<sup>\*</sup>p < .05. \*\*p < .01, two-tailed tests.

Table 6. OLS Regression Results, Study 2.

	Status	Power	Positive	affect	Наррі	iness	Life satis	sfaction	SWB co	mposite
Variables	Model I	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Social class	0.24**	0.34**	0.10**	0.06*	0.41**	0.28**	0.39**	0.28**	0.20**	0.14**
	(0.04)	(0.04)	(0.02)	(0.02)	(0.07)	(0.07)	(0.05)	(0.05)	(0.03)	(0.03)
Status	` ,	, ,	, ,	0.20**	, ,	0.71**	, ,	0.36**	, ,	0.30**
				(0.04)		(0.11)		(80.0)		(0.05)
Power				-0.03		-0.11 <sup>°</sup>		0.07		-0.02
				(0.03)		(0.09)		(0.07)		(0.04)
Male	-0.01	0.08	$-0.12^{\dagger}$	-0.11 <sup>†</sup>	-0.20	-0.18	-0.23	-0.23	-0.14	-0.14
	(0.12)	(0.14)	(0.07)	(0.07)	(0.21)	(0.19)	(0.16)	(0.15)	(0.09)	(0.09)
White	$-0.30^{\dagger}$	-0.19	-0.11	-0.06	0.04	0.24	0.18	0.30	-0.01	0.08
	(0.17)	(0.19)	(0.10)	(0.10)	(0.29)	(0.27)	(0.22)	(0.21)	(0.13)	(0.12)
Age	0.01	-0.00	0.00	0.00	0.00	-0.00	-0.00	-0.01	0.00	-0.00
	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)
Constant	3.54**	2.17***	2.97**	2.32***	5.87**	3.59**	3.08**	Ì.64 <sup>′∗</sup> *	-0.99**	-2.02**
	(0.32)	(0.36)	(0.19)	(0.21)	(0.54)	(0.59)	(0.42)	(0.47)	(0.24)	(0.27)
$R^2$	.12	.16	.07	.16	.11	.24	.16	.25	.14	.26

Note. N = 325. Models are OLS regressions with unstandardized coefficients. Standard errors in parentheses. OLS = ordinary least squares; SWB = subjective well-being.

SWB indices (Appendix A). We next examined the predicted simultaneous indirect effects of status and power. These analyses revealed significant indirect effects of status on positive affect (.026, .076), happiness (.099, .265), life satisfaction (.034, .154), and SWB composite (.041, .116). In contrast, the indirect effects of power were not significant for positive affect (-.033, .015), happiness (-.110, .030), life satisfaction (-.033, .089), or SWB composite (-.040, .026). The indirect effect of status was significantly greater than that of power on positive affect (.094, .353), happiness (.019, .100), and SWB composite (.025, .145), but not on life satisfaction (-.044, .169).

In sum, the results support our prediction that status mediates the effect of social class on various indices of SWB and that the indirect effect of status is greater than that of power (with the only exception of life satisfaction). This may reflect

differing antecedents of the emotional versus evaluative aspects of SWB (Diener et al., 2010) because resource control (as reflected by power) tends to be more strongly associated with evaluative indices (e.g., life satisfaction) than with emotional indices of SWB (Kahneman & Deaton, 2010), we also observe this pattern in our data:  $r_{\text{(power, life satisfaction)}} = .33$  versus  $r_{\text{(power, affect)}} = .22$  and  $r_{\text{(power, happiness)}} = .26$ .

Notably, our results reveal significant indirect effects of power when examining it separately (Appendix A) but not when accounting for the effects of status. These findings are notable because they replicate prior work but demonstrate the importance of examining power and status simultaneously. For instance, Kifer et al. (2013) also found that power enhances SWB on its own, but they did not consider the simultaneous effects of status, and our results suggest that the effect they attribute to power may actually be due to its

 $<sup>^{\</sup>dagger}p < .10. *p < .05. **p < .01, two-tailed tests.$ 

covariance with status. In other words, if we had investigated only power, we might have erroneously concluded that the effects of social class on SWB were due solely to the psychology of power. Although we predict that the indirect effect of power is weaker than that of status, the logic behind this prediction may explain why we did not find a distinct indirect effect of power when we examined it in tandem with status.

The results of Study 2 are consistent with those of Studies 1a and 1b, extending our investigation beyond objective indices of social class and power and beyond the work domain. However, although the longitudinal nature of Studies 1a and 1b mitigates concerns about common method bias, our overall studies thus far do not provide conclusive support for our causal prediction that social class shapes the status and power that individuals experience in their groups. We addressed this issue in Study 3 by manipulating participants' subjective social class to conduct a more definitive test of our predicted causal relationships between social class, status, and power and their subsequent effects on SWB. Moreover, Study 3 also extended our prior studies by utilizing expanded measures of SWB.

# Study 3: Experimental Evidence on Social Class, Status, Power, and SWB

#### Method

**Participants.** We recruited 398 U.S. adults (54.0% female;  $M_{\rm age} = 36.64$ ,  $SD_{\rm age} = 11.54$ ) from Amazon Mechanical Turk (28 individuals failed the attention check and were excluded from the study).

Social class manipulation. Participants were presented with an image of a 10-rung ladder and instructed to think of the ladder "as representing where people stand in the United States" (e.g., Kraus, Côté, & Keltner, 2010; Kraus & Keltner, 2013). As in prior research (Anderson et al., 2012; Kraus et al., 2010; Kraus & Keltner, 2013), participants were randomly assigned to one of two experimental conditions (low vs. high social class) that instructed them to either compare themselves with a person at the top (low social class condition) or bottom (high social class condition) of the ladder. To enhance the manipulation, participants wrote about differences between themselves and that person and how those differences might affect a hypothetical interaction between them. Participants then indicated their own standing on the ladder (1 = bottom)rung to 10 = top rung). Subsequent examination of participants' writings revealed that 30 participants did not follow the manipulation and, thus, were filtered from our analyses.<sup>3</sup>

Measures. Status ( $\alpha=.95$ ), power ( $\alpha=.95$ ), and happiness were assessed using the same measures as in Study 2. We used expanded scales for affect (20-item PANAS; Watson et al., 1988;  $\alpha_{PA}=.91$ ,  $\alpha_{NA}=.95$ ) and life satisfaction (5-item Satisfaction with Life scale; Diener, Emmons,

Larsen, & Griffin, 1985) ( $\alpha = .93$ ). As in Study 2, we combined these to create a composite SWB measure.

#### Results and Discussion

Our manipulation was effective in shaping participants' perceived social class, as participants in the higher-social-class condition (M = 5.24, SD = 1.56) placed themselves significantly higher on the ladder than did participants in the lower-social-class condition, M = 4.81, SD = 1.67, t(338) = 2.49, p = .01, d = .27. More central to our predictions, participants in the high-social-class condition reported higher status (M = 4.44, SD = 1.29) and power (M = 3.54, SD = 1.39) than did participants in the low-social-class condition, status: M = 4.02, SD = 1.36, t(338) = 2.92, p < .01, d = .32; power: M = 3.07, SD = 1.39, t(338) = 3.13, p < .01, d = .34 (Figure 1). These results confirm our prediction that one's self-perceived social-class exerts a causal impact on self-perceived status and power.

We next examined whether the causal implications of social class for status and power were associated with significant indirect effects of status and power. When examining the indirect effect of status or power separately, we found significant indirect effects of both constructs on all of our dependent variables (Appendix A). When examining the mediating mechanisms of status and power simultaneously, we found significant indirect effects of status on affect (.025, .130), happiness (.067, .387), life satisfaction (.078, .412), and SWB composite (.034, .177), while the indirect effects of power were not significant for any of our SWB indices, affect (-.062, .005); life satisfaction (-.008, .140); SWB composite: (-.028, .037), except for happiness (.008, .241). Moreover, the indirect effect of status was significantly greater than that of power on affect (.030, .182), life satisfaction (.026, .401), and SWB composite (.030, .202), but not on happiness (-.056, .342). These findings corroborate our predictions about the indirect effect of status, and do so in the context of a study that provides stronger causal evidence for the impact of social class on status and power. Notably, as in our previous studies, while we found evidence of an indirect effect of power when considered independently, we did not find such evidence when simultaneously accounting for the indirect impact of status. These results further demonstrate the importance of distinguishing and examining both status and power, to isolate and accurately attribute their respective effects.

# Study 4: Status, Power, and Need Fulfillment

Study 4 extends our prior studies by investigating our rationale that the indirect effects of status and power are due to the fundamental psychological needs that each fulfills. To test this, Study 4 uses a moderation approach (as recommended by Spencer, Zanna, & Fong, 2005) and tests whether

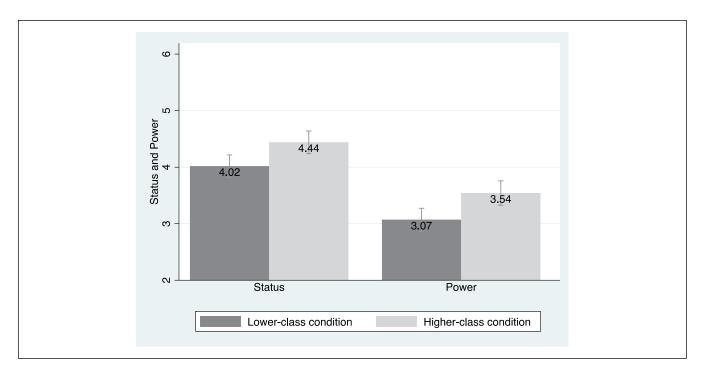


Figure 1. Status and power by social class condition (error bars represent 95% confidence intervals), Study 3.

the indirect effects of status and power are moderated by individual differences in the strength of the respective psychological needs associated with each. This approach reflects the premise that the extent to which one experiences a particular psychological need (i.e., the strength of that need) determines the subsequent significance and impact of that need for that individual (e.g., Rios, Fast, & Gruenfeld, 2015).

Our theorizing specifies that relatedness and control/ autonomy needs represent two prominent needs addressed by status and power, respectively, and that this underlies the impact each has on SWB. This rationale suggests that the impact of status on SWB (and, thus, the indirect effect of social class on SWB through status) will be accentuated among individuals with relatively stronger dispositional need to belong (an index of one's relatedness needs; Baumeister & Leary, 1995), as these individuals place greater emphasis on relatedness needs and thus their SWB will be more strongly impacted by fulfillment of these needs (or lack thereof). Similarly, the impact of power on SWB (and, thus, the indirect effect of social class on SWB through power) will be accentuated among those with a relatively stronger dispositional need for control/autonomy.<sup>4</sup> We thus examine whether the strength of one's need to belong moderates the indirect effect of status and whether the strength of one's dispositional need for control and autonomy (Burger & Cooper, 1979) moderates the indirect effect of power.

#### Method

Participants. A total of 270 U.S. adult participants (51.5% female;  $M_{\rm age} = 36.01$ ,  $SD_{\rm age} = 12.34$ ) were recruited from

Amazon Mechanical Turk. Twenty individuals failed the attention check and were excluded from the study.

### Measures

Social class, status ( $\alpha = .96$ ), power ( $\alpha = .95$ ), happiness, and the control variables were identical to those in Studies 2 and 3. Affect ( $\alpha_{PA} = .90$ ,  $\alpha_{NA} = .93$ ) and life satisfaction ( $\alpha = .93$ ) were the same as in Study 3. We again combined these to form a composite SWB index.

Need to belong. Participants completed the 10-item Need to Belong scale (Leary, Kelly, Cottrell, & Schreindorfer, 2013) (e.g., "I have a strong need to belong";  $\alpha = .89$ ).

Need for control and autonomy. Participants completed the eight-item Desirability of Control scale (Burger & Cooper, 1979) (e.g., "I enjoy making my own decisions";  $\alpha = .80$ ).

# Results and Discussion

Descriptive statistics and correlations are presented in Table 7. We conducted OLS regressions to test our predictions. We first examined the effect of social class on SWB. As Table 8 shows, social class was positively related to affect, Model 3: b = 0.16, t(245) = 4.20, p < .001, 95% CI = [0.08, 0.23]; happiness, Model 6: b = 0.34, t(245) = 4.64, p < .001, 95% CI = [0.20, 0.49]; life satisfaction, Model 9: b = 0.34, t(245) = 6.35, p < .001, 95% CI = [0.24, 0.45]; and SWB composite, Model 12: b = 0.59, t(245) = 5.42, p < .001. Social class was

also positively related to individuals' status, Model 1: b =

**Table 7.** Descriptive Statistics and Correlations, Study 4 (N = 250).

	М	SD	ı	2	3	4	5	6	7	8	9	10	П
1. Social Class	4.72	1.80	_										
2. Status	4.33	1.31	.41**	_									
3. Power	3.37	1.35	.31**	.69**	_								
4. Life satisfaction	4.31	1.64	.38**	.52**	.47**	_							
5. Affect	1.58	1.15	.26**	.58**	.53**	.62**	_						
6. Happiness	7.66	2.18	.30**	.59**	.53**	.76**	.74**	_					
7. Subjective well-being composite	-0.03	3.24	.34**	.63**	.57**	.85**	.92**	.91**	_				
8. Need to belong	2.85	0.83	08	03	.05	03	14*	08	10	_			
9. Desirability of control	5.29	0.92	.12	.33**	.43**	.27**	.41**	.34**	.39**	15*	_		
I 0. Male	0.48	0.50	.01	02	.05	05	.00	.00	0I	15*	.08	_	
II. White	0.83	0.37	.06	02	05	.12	0I	.05	.05	.00	01	.00	_
12. Age	36.01	12.34	.09	.16*	.04	.05	.21**	.16*	.17**	06	04	08	.17**

<sup>\*</sup>p < .05. \*\*p < .01, two-tailed tests.

Table 8. OLS Regression Analyses, Study 4.

	Status	Power		Affect		1	Happiness		Lif	e satisfactio	on	SV	VB composi	ite
Variables	Model I	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model II	Model 12	Model 13	Model 14
Social class	0.29**	0.24**	0.16**	0.01	0.01	0.34**	0.06	0.05	0.34**	0.17**	0.16**	0.59**	0.14	0.13
	(0.04)	(0.05)	(0.04)	(0.03)	(0.03)	(0.07)	(0.07)	(0.07)	(0.05)	(0.05)	(0.05)	(0.11)	(0.09)	(0.09)
Status				0.30**	0.05		0.63**	-0.04		0.36**	-0.10		0.93**	-0.01
				(0.06)	(0.15)		(0.12)	(0.28)		(0.10)	(0.23)		(0.17)	(0.40)
Need to belong				-0.14*	-0.50*		-0.14	-1.16**		-0.05	-0.73*		-0.30	-1.69**
				(0.07)	(0.21)		(0.14)	(0.40)		(0.11)	(0.32)		(0.19)	(0.57)
Status $\times$ need to belong				, ,	0.09 <sup>†</sup>		, ,	0.25**		, ,	0.17*		, ,	0.34*
_					(0.05)			(0.09)			(0.07)			(0.13)
Power				0.17**	0.16		0.32**	0.91*		0.24**	0.35		0.53**	0.87
				(0.06)	(0.24)		(0.12)	(0.45)		(0.09)	(0.36)		(0.17)	(0.64)
Desirability of control				0.26**	0.28 <sup>†</sup>		0.29*	0.69*		0.11	0.22		0.55**	0.84*
				(0.07)	(0.14)		(0.13)	(0.27)		(0.10)	(0.22)		(0.19)	(0.38)
Power × Desirability of				` ,	-0.00		` ,	-0.11		` '	-0.02		, ,	-0.07
control					(0.04)			(80.0)			(0.06)			(0.11)
Male	-0.03	0.12	0.02	-0.06	-0.06	0.06	-0.04	-0.08	-0.17	-0.22	-0.22	-0.04	-0.24	-0.25
	(0.15)	(0.16)	(0.14)	(0.11)	(0.12)	(0.26)	(0.22)	(0.22)	(0.19)	(0.17)	(0.17)	(0.39)	(0.31)	(0.31)
White	-0.25	-0.27	-0.19	-0.05	-0.06	0.07	0.33	0.30	0.43 <sup>†</sup>	0.60*	0.58*	0.03	0.44	0.41
	(0.20)	(0.22)	(0.19)	(0.15)	(0.15)	(0.36)	(0.29)	(0.29)	(0.26)	(0.23)	(0.23)	(0.52)	(0.41)	(0.41)
Age	0.01*	0.00	0.02**	0.01**	0.01**	0.02*	0.01	0.01	-0.00	-0.01	-0.01	0.04*	0.02 <sup>†</sup>	0.02 <sup>†</sup>
-	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Constant	2.66**	2.33**	0.32	-1.69**	-0.78	5.12**	Ì.69 <sup>†</sup>	2.52	2.45**	0.50	1.86	-4.09**	-9.64**	-7.17**
	(0.33)	(0.36)	(0.30)	(0.49)	(0.96)	(0.57)	(0.95)	(1.84)	(0.42)	(0.74)	(1.46)	(0.84)	(1.32)	(2.58)
$R^2$	`.19 <sup>′</sup>	.10	`.I0 <sup>′</sup>	.43	.44	`.H <sup>′</sup>	.40	.43	.16	.35	.36	`.I3 <sup>′</sup>	.47	.49

Note. N = 250. Models are OLS regressions with unstandardized coefficients. Standard errors in parentheses. OLS = ordinary least squares; SWB = subjective well-being.

0.29, t(245) = 6.98, p < .001, 95% CI = [0.21, 0.38], and power, Model 2: b = 0.24, t(245) = 5.18, p < .001, 95% CI = [0.15, 0.33]. We found a significant indirect effect of status and power when each was examined on its own (Appendix A).

When examining the indirect effects of status and power simultaneously, we found significant indirect effects of status on affect (.046, .130), happiness (.088, .270), life satisfaction (.041, .168), and SWB composite (.141, .384). We also found significant indirect effects of power on affect (.012, .068), happiness (.021, .131), life satisfaction (.018,

.103), and SWB composite (.046, .205). Moreover, the indirect effect of status was significantly greater than that of power on affect (.001, .106), happiness (.006, .223), and SWB composite (.009, .288), but not on life satisfaction (-.036, .133).

Next, we tested our moderated mediation predictions. First, regarding status and need to belong, our reasoning essentially indicated that individuals' need to belong would moderate the second stage of the status mediation pathway—that is, status has a stronger impact on SWB among those

 $<sup>^{\</sup>dagger}p < .10. *p < .05. **p < .01$ , two-tailed tests.

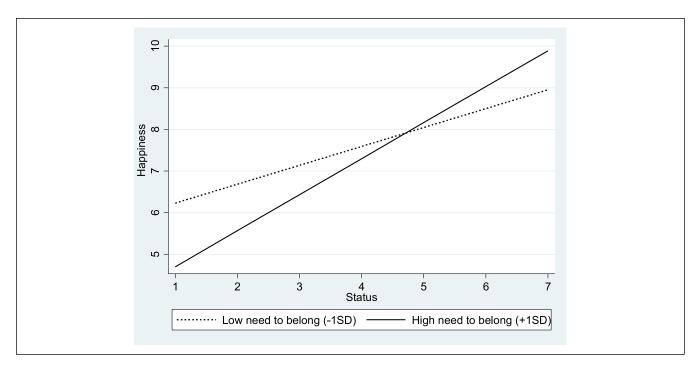


Figure 2. The interaction of status and need to belong in predicting happiness, Study 4.

with a stronger need to belong. Consistent with our reasoning, we found a significant Status × Need to belong interaction (Table 8) for happiness, Model 8: b = 0.25, t(239) =2.64, p = .009, 95% CI = [0.06, 0.43]; life satisfaction, Model 11: b = 0.17, t(239) = 2.24, p = .03, 95% CI = [0.02, 0.31]; and SWB composite, Model 14: b = 0.34, t(239) =2.59, p = .01, 95% CI = [0.08, 0.60], as well as a marginally significant interaction for affect, Model 5: b = 0.09, t(239)= 1.81, p = .07, 95% CI = [-0.01, 0.18]. Simple slope analyses further confirmed our predictions as, for each of our SWB indices, the impact of status was stronger among those relatively higher in need to belong. For example, as Figure 2 shows, the impact of status on happiness was more pronounced among those with higher (+1 SD) need to belong, b = 0.86, t(239) = 5.83, p < .001, 95% CI = [0.57, 1.16], thanamong those with lower (-1 SD) need to belong, b = 0.45, t(239) = 3.25, p = .001, 95% CI = [0.18, 0.73].

We next conducted a moderated mediation analysis (Preacher, Rucker, & Hayes, 2007) to examine whether need to belong moderates the indirect effects of social class through status. This analysis revealed significant indirect effects of status at both high (+1 *SD*) need to belong, affect: (.029, .097), happiness: (.069, .215), life satisfaction: (.035, .142), SWB composite: (.097, .315), and low (-1 *SD*) need to belong, affect: (.016, .064), happiness: (.027, .129), life satisfaction: (.004, .081), SWB composite: (.043, .190). However, as expected, the indirect effects of status at high need to belong were greater than those at low need to belong, affect: (.001, .032), happiness: (.013, .073), life satisfaction: (.002, .057), SWB composite: (.011, .103).

Next, we examined our predictions regarding power and the moderating impact of the need for control/autonomy. However, as indicated in Table 8, we did not find a Power × Desirability of control interaction on any of our SWB measures. Moderated mediation analyses likewise indicated that desirability of control did not moderate the indirect effect of power on any of our SWB indices, affect (-.004, .003), happiness (-.022, .003), life satisfaction (-.012, .003), and SWB composite (-.021, .004). These findings may have been due to the relatively weaker effect of power (vs. status) on SWB, which may have reduced the statistical power to detect significant moderation by dispositional need strength.

As in our prior studies, Study 4 provided support for our predictions about the indirect effect of status and its relatively stronger impact versus that of power (except in the case of life satisfaction, which was also the case in Study 2 and may again reflect a relatively stronger link between resource control, that is, power, and evaluative aspects of SWB). Moreover, we also found support for our reasoning that the indirect effect of status can be attributed to the psychological needs it addresses (i.e., relatedness/belongingness needs). Contrary to our prior studies, we found support for our prediction regarding the indirect effect of power (even when accounting for status). However, we did not find evidence that the indirect effect of power varied as a function of individuals' control and autonomy needs. These findings, as well as those from our prior studies, highlight the need for additional research on the distinct indirect effect of power (decoupled from status) and its related psychological needs.

### General Discussion

Prior research on social class and SWB has tended to focus on the magnitude of their association, seeking to clarify the extent to which social class shapes SWB. The current research extends prior work by examining the underlying mechanisms that account for the impact of social class on SWB, thus seeking to clarify why social class shapes SWB. In particular, we investigate whether the effects of social class on the status and power that people experience in their groups subsequently shape their SWB. Across a variety of measures and empirical approaches, we find consistent support for our prediction that status accounts, at least partially, for the impact of social class on SWB. Moreover, status plays a more critical mediating role than power in explaining the implications of social class for SWB. Overall, our findings deepen understanding of the psychology of social class: the aspects of social class that matter most for SWB relate to the impact that social class can exert on how one is viewed by others and the social relations that one enjoys with others. By comparison, the bountiful tangible and materialistic privileges of social class are less relevant in explaining the benefits of high social class for individuals' SWB.

It is important to note that, except for Study 4, we did not generally find statistical support for our prediction that power, when considered together with status, would significantly mediate the effects of social class on SWB. However, we did find significant indirect effects of power when not accounting for the simultaneous effects of status in most cases (Appendix A). This is an important finding because prior research has been dominated by a singular focus on power and has only recently begun to empirically distinguish status from power. If we had examined only power in the current research, we would have reached a significantly different conclusion—namely, that concerns about power are critical to understanding the implications of social class for SWB. However, such a conclusion would be misleading because our results suggest that the indirect effect of power, when examined on its own, may be largely due to its covariance with status.

More generally, we predicted that power would mediate the effect of social class on SWB because it shapes the extent to which one's control and autonomy needs are addressed. The lack of consistent support for this prediction does not necessarily imply that control and autonomy are unimportant. Rather, it may indicate that these concerns are indirectly addressed through deference from others and influence over others, which are both consequences of status bestowing autonomy and control (Berger et al., 1972). That said, any conclusions about the relative impact and dynamics of status and power must be considered in relation to the specific phenomenon under study. Indeed, as noted above, Dubois et al. (2015) found that power, but not status, mediates the effect of social class on unethical behavior. Overall, the precise role of status and power in accounting for the consequences of

social class will vary depending on the nature of the outcome under examination. Thus, theoretical precision is necessary when investigating the various—and diverse—consequences of social class.

#### Limitations and Future Directions

Our findings advance research on the psychology of social hierarchy by demonstrating that status and power represent distinct concerns that underlie the psychological dynamics and consequences of social class. However, there are some important limitations to our current studies, promising avenues for future research. First, our studies do not directly probe the temporal, sequential emergence of our full set of causal predictions among status, power, and SWB, nor does it examine whether these effects are amplified through continual self-reinforcement. To more precisely understand the full set of dynamics, future research should examine our causal predictions as they unfold, perhaps by examining a cohort of individuals as they initially enter a new group (or groups) and monitoring the evolution of their status, power, and SWB.

Second, while our theorizing focuses on the causal effects of social class on status and power (and our data in Study 3 provide a direct test of this causal pattern), the reverse causal pattern may likewise unfold—that is, power and status may be leveraged in ways that ultimately enhance one's social class. Similarly, it is possible that status and power not only shape SWB but are also reciprocally shaped by it, as perhaps those with greater SWB enjoy greater socio-emotional resources that can be leveraged to attain greater status and power in their groups. Future research may consider additional tests of our proposed causal relationships, such as orthogonally manipulating social class, status, and/or power in examining our enter pattern of causal predictions.

Third, although our focus, SWB, is based on our theoretical interest and the vast literature on its association with social class, future research may examine whether our predictions apply to other dimensions of well-being, such as mental health, depression, stress, and personal growth. Relatedly, as discussed in Study 2, the relatively stronger indirect effects of status were more prevalent with respect to emotional (e.g., affect), rather than evaluative (e.g., life satisfaction), aspects of SWB. Future research should test whether this effect replicates in other well-being dimensions.

Finally, it is important to acknowledge that the individuals in our U.S. samples were predominately White (83%-95%). Thus, it is important to investigate whether the current findings generalize to racial minorities. This issue is both practically important and theoretically significant because the effects of social class on status and power may differ for racial minorities and members of other stigmatized groups given the inequitable social stratification (Fiske, 2010) and discrimination (Dovidio & Gaertner, 1986) that they experience.

#### Conclusion

The current studies contribute to the research on the psychology of social hierarchy. In particular, they highlight the value of unpacking the multi-dimensional nature of social class and separately examining the distinct yet simultaneous mechanisms that ultimately shape its consequences. Moreover, this research provides deeper insight into prior research that has tended to find paradoxically weak effects of social class on SWB. In particular, our findings suggest that social class is less likely to affect SWB if and when it manifests in ways that diminish one's status and the psychological needs associated with it. Although high social class can

facilitate the attainment of greater status in one's groups, this impact is by no means guaranteed. The attainment and maintenance of high status requires individuals to act in accordance with the expectations of those conferring status, and high-social-class individuals that disregard those expectations (e.g., subjugating others) are unlikely to realize the status-relevant advantages (i.e., heightened SWB) of their social class position. These dynamics may play an important role in explaining the paradoxically weak effects of social class on SWB, because in some cases an individual may leverage his or her high social class in ways that prioritize the enhancement of wealth, resources, and control rather than social relations and social reputation.

Appendix A

Indirect Effects of Status or Power as Single Mediators, Studies 1-4.

	Indirect effect 95% CI with 5	5,000 bootstrapping
	Status only (without accounting for power)	Power only (without accounting for status)
Study Ia		
Affect	[0.016, 0.042]	[-0.011, 0.012]
Life satisfaction	[0.014, 0.037]	[-0.002, 0.021]
SWB composite	[0.017, 0.043]	[-0.007, 0.016]
Study 1b		
Affect	[0.020, 0.094]	[0.006, 0.052]
Life satisfaction	[0.016, 0.073]	[0.002, 0.047]
SWB composite	[0.020, 0.093]	[0.006, 0.054]
Study 2		
Affect	[0.025, 0.068]	[0.004, 0.050]
Happiness	[0.092, 0.232]	[0.014, 0.161]
Life satisfaction	[0.053, 0.157]	[0.038, 0.149]
SWB composite	[0.042, 0.107]	[0.017, 0.081]
Study 3		-
Affect	[0.019, 0.100]	[0.009, 0.072]
Happiness	[0.090, 0.462]	[0.099, 0.424]
Life satisfaction	[0.083, 0.446]	[0.082, 0.371]
SWB composite	[0.036, 0.175]	[0.030, 0.134]
Study 4		-
Affect	[0.094, 0.199]	[0.057, 0.150]
Happiness	[0.177, 0.388]	[0.109, 0.278]
Life satisfaction	[0.105, 0.245]	[0.068, 0.176]
SWB composite	[0.280, 0.587]	[0.173, 0.438]

Note. CI = confidence interval; SWB = subjective well-being.

# Appendix B

#### Status and Power Scales, Studies 2-4

We would like to ask how you feel about your status and power in general—that is, your status and power across all of the groups in your life, broadly defined. These include all of your social groups, your work group, your friends, family, volunteer organizations, and all the other groups to which

you belong. Although your experiences in each of these groups may vary, we would like you to reflect on your overall feelings across all these groups.

#### Status

Please respond to the following questions about the status you feel that you generally have across all of the groups to which you belong.

- How much status do you have in general, across all of these groups?
- 2. To what extent do you feel highly respected?
- 3. To what extent do others make you feel admired?
- 4. To what extent do others show esteem toward you?
- 5. How much prestige do you enjoy in general, across all of these groups?
- 6. To what extent do you feel that others look up to you?

# **Power**

Please respond to the following questions about the power you feel that you generally have across all of the groups to which you belong.

- 1. How much power do you have over others in general, across all of these groups?
- 2. To what extent do you feel powerful?
- 3. To what extent do others treat you like someone who is powerful?
- 4. How much do you control others' ability to get what they want?
- 5. To what extent do your evaluations of others affect them?
- 6. To what extent do you control significant resources in general, across all of these groups?

Responses were made on a scale from 1 (not at all) to 7 (a lot) for both scales.

# **Acknowledgement**

We are thankful for the exceptional editorial guidance of Michael Robinson and constructive comments from the three anonymous reviewers. We also wish to thank Nir Halevy, Nicholas A. Hays, and Gavin Kilduff, for their valuable feedback on earlier versions of this paper.

# **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### **Funding**

The author(s) received no financial support for the research, authorship, and/or publication of this article.

#### **Notes**

- To provide a detailed examination of our findings, we present results for each subjective well-being (SWB) dimension on its own and results for the SWB composite.
- 2. Using social class in Wave 1 and status, power, and SWB in Wave 2, and using all variables from the same wave, yielded identical findings (pp. 6-11 in the Supplementary Materials).
- 3. This was determined by identifying participants who clearly failed to follow the instructions, such as describing similarities

- rather than differences between themselves and the hypothetical person, refusing to acknowledge social class differences, or writing about things irrelevant to the task.
- 4. Although the indirect effect of status and/or power may each be moderated by other dispositional needs, we focus on Status × Need to belong and Power × Desirability of control because these are the moderating effects that most directly follow from our theorizing regarding the role of status and power in shaping SWB. In other words, we focus on those moderating effects that most closely probe our theorized underlying mechanisms.

# Supplemental Material

Supplemental material is available online with this article.

#### References

- Adler, N., Epel, E., Castellazzo, G., & Ickovics, J. R. (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.
- Alicke, M. D., Zell, E., & Bloom, D. L. (2010). Mere categorization and the frog-pond effect. *Psychological Science*, 21, 174-177.
- Anderson, C., & Berdahl, J. L. (2002). The experience of power: Examining the effects of power on approach and inhibition tendencies. *Journal of Personality and Social Psychology*, 83, 1362-1377.
- Anderson, C., Hildreth, J. 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., Kraus, M. W., & Galinsky, A. D. (2012). The local-ladder effect: Social status and subjective well-being. *Psychological Science*, 23, 764-771.
- Barling, J., & Weatherhead, J. G. (2016). Persistent exposure to poverty during childhood limits later leader emergence. *Journal of Applied Psychology*, 101, 1305-1318.
- 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.
- Beehr, T. A. (1995). *Psychological stress in the workplace*. London, England: Routledge.
- Belmi, P., & Laurin, K. (2016). Who wants to get to the top? Class and lay theories about power. *Journal of Personality and Social Psychology*, 111, 505-529.
- Berger, J., Cohen, B. P., & Zelditch, M. (1972). Status characteristics and social interaction. *American Sociological Review*, 37, 241-255.
- Blader, S. L., & Chen, Y. (2012). Differentiating the effects of status and power: A justice perspective. *Journal of Personality and Social Psychology*, 102, 994-1014.

Blader, S. L., Shirako, A., & Chen, Y. (2016). Looking out from the top: Differential effects of status and power on perspective taking. *Personality and Social Psychology Bulletin*, 42, 723-737.

- Blader, S. L., & Yu, S. (2017). Are status and respect different or two sides of the same coin? *Academy of Management Annals*, 11, 800-824.
- Blau, P. M. (1964). *Exchange and power in social life*. New York, NY: John Wiley.
- Bowman, N. A., & Nisbett, R. E. (2009). Social class differences in self, attribution, and attention: Socially expansive individualism of middle-class Americans. *Personality and Social Psychology Bulletin*, 35, 880-893.
- Burger, J. M., & Cooper, H. M. (1979). The desirability of control. *Motivation and Emotion*, *3*, 381-393.
- Correll, S. J., & Ridgeway, C. L. (2006). Expectation states theory. In J. DeLamater (Ed.), *Handbook of social psychology* (pp. 29-51). New York, NY: Kluwer Academic/Plenum Press.
- Curhan, K. B., Levine, C. S., Markus, H. R., Kitayama, S., Park, J., Karasawa, M., . . . Ryff, C. D. (2014). Subjective and objective hierarchies and their relations to psychological well-being: A U.S. Japan comparison. *Social Psychological and Personality Science*, 5, 855-864.
- Datu, J. A. D., & Reyes, J. A. S. (2015). The dark side of possessing power: Power reduces happiness in a collectivist context. Social Indicators Research, 124, 981-991.
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985).
  The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71-75.
- Diener, E. D., Ng, W., Harter, J., & Arora, R. (2010). Wealth and happiness across the world: Material prosperity predicts life evaluation, whereas psychosocial prosperity predicts positive feeling. *Journal of Personality and Social Psychology*, 99, 52-61.
- Dovidio, J. F., & Gaertner, S. L. (1986). *Prejudice, discrimination, and racism*. Orlando, FL: Academic Press.
- Dubois, D., Rucker, D. D., & Galinsky, A. D. (2015). Social class, power, and selfishness: When and why upper and lower class individuals behave unethically. *Journal of Personality and Social Psychology*, 108, 436-449.
- Dutton, D. B., & Levine, S. (1989). Overview, methodological critique, and reformulation. In J. P. Bunker, D. S. Gomby, & B. H. Kehrer (Eds.), *Pathway to health*. Menlo Park, CA: The Henry J. Kaiser Family Foundation.
- Fast, N. J., Gruenfeld, D. H., Sivanathan, N., & Galinsky, A. D. (2009). Illusory control: A generative force behind power's far-reaching effects. *Psychological Science*, 20, 502-508.
- 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. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., pp. 941-982). Hoboken, NJ: John Wiley.
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82, 878-902.
- Frey, B. S., & Stutzer, A. (2000). Happiness, economy and institutions. *The Economic Journal*, 110, 918-938.
- Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology*, 85, 453-466.

Galinsky, A. D., Magee, J. C., Inesi, M. E., & Gruenfeld, D. H. (2006). Power and perspectives not taken. *Psychological Science*, 17(12), 1068-1074.

- Galinsky, A. D., Magee, J. C., Gruenfeld, D. H., Whitson, J. A., & Liljenquist, K. A. (2008). Power reduces the press of the situation: Implications for creativity, conformity, and dissonance. *Journal of Personality and Social Psychology*, 95, 1450-1466.
- Guinote, A., Judd, C. M., & Brauer, M. (2002). Effects of power on perceived and objective group variability: Evidence that more powerful groups are more variable. *Journal of Personality and Social Psychology*, 82, 708-721.
- Hays, N. A., & Bendersky, C. (2015). Not all inequality Is created equal: Effects of status versus power hierarchies on competition for upward mobility. *Journal of Personality and Social Psychology*, 108, 867-882.
- 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(3), 165-196
- Inaba, A., Thoits, P. A., Ueno, K., Gove, W. R., Evenson, R. J., & Sloan, M. (2005). Depression in the United States and Japan: Gender, marital status, and SES patterns. Social Science & Medicine, 61, 2280-2292.
- Kahneman, D., & Deaton, A. (2010). High income improves evaluation of life but not emotional well-being. Proceedings of the National Academy of Sciences of the United States of America, 107, 16489-16493.
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and Inhibition. Psychological Review, 110, 265-284.
- Kifer, Y., Heller, D., Perunovic, W. E., & Galinsky, A. D. (2013). The good life of the powerful: The experience of power and authenticity enhances subjective well-being. *Psychological Science*, 24, 280-288.
- Kraus, M. W., Côté, S., & Keltner, D. (2010). Social class, contextualism, and empathic accuracy. *Psychological Science*, 21, 1716-1723.
- Kraus, M. W., Horberg, E. J., Goetz, J. L., & Keltner, D. (2011). Social class rank, threat vigilance, and hostile reactivity. Personality and Social Psychology Bulletin, 37, 1376-1388.
- Kraus, M. W., & Keltner, D. (2013). Social class rank, essentialism, and punitive judgment. *Journal of Personality and Social Psychology*, 105, 247-261.
- Kraus, M. W., Piff, P. K., & Keltner, D. (2009). Social class, sense of control, and social explanation. *Journal of Personality and Social Psychology*, 97, 992-1004.
- Kraus, M. W., Piff, P. K., & Keltner, D. (2011). Social class as culture: The convergence of resources and rank in the social realm. *Current Directions in Psychological Science*, *20*, 246-250.
- Lammers, J., Galinsky, A. D., Gordijn, E. H., & Otten, S. (2012). Power increases social distance. *Social Psychological and Personality Science*, 3, 282-290.
- Lammers, J., Stoker, J. I., Rink, F., & Galinsky, A. D. (2016). To have control over or to be free from others? The desire for power reflects a need for autonomy. *Personality and Social Psychology Bulletin*, 42, 498-512.
- Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2013). Construct validity of the need to belong scale: Mapping the nomological network. *Journal of Personality Assessment*, 95, 610-624.
- Li, W. D., Arvey, R. D., & Song, Z. (2011). The influence of general mental ability, self-esteem and family socioeconomic status on

- leadership role occupancy and leader advancement: The moderating role of gender. *The Leadership Quarterly*, 22, 520-534.
- Luhmann, M., Hofmann, W., Eid, M., & Lucas, R. E. (2012). Subjective well-being and adaptation to life events: A metaanalysis. *Journal of Personality and Social Psychology*, 102, 592-615.
- Luttmer, E. F. P. (2005). Neighbors as negatives: Relative earnings and well-being. *The Quarterly Journal of Economics*, 120, 963-1002.
- Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self reinforcing nature of power and status. Academy of Management Annals, 2, 351-398.
- Magee, J. C., & Smith, P. K. (2013). The social distance theory of power. Personality and Social Psychology Review, 17, 158-186.
- Mason, W., & Suri, S. (2012). Conducting behavioral research on Amazon's Mechanical Turk. *Behavior Research Methods*, 44, 1-23.
- Morris, J. H., & Snyder, R. A. (1979). A second look at need for achievement and need for autonomy as moderators of role perception-outcome relationships. *Journal of Applied Psychology*, 64, 173-178.
- Mroczek, D. K., & Kolarz, C. M. (1998). The effect of age on positive and negative affect: A developmental perspective on happiness. *Journal of Personality and Social Psychology*, 75, 1333-1349.
- Pettit, N. C., & Sivanathan, N. (2012). The eyes and ears of status: How status colors perceptual judgment. *Personality and Social Psychology Bulletin*, 38, 570-582.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42, 185-227.
- Prenda, K. M., & Lachman, M. E. (2001). Planning for the future: A life management strategy for increasing control and life satisfaction in adulthood. *Psychology Aging*, 16, 206-216.
- Reis, H. T., Sheldon, K., Gable, S. L., & Ryan, R. M. (1995). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and Social Psychology Bulletin*, 26, 419-435.
- Rios, K., Fast, N. J., & Gruenfeld, D. H. (2015). Feeling high but playing low. *Personality and Social Psychology Bulletin*, 41, 1135-1146.
- Russell, J. A., & Barrett, L. F. (1999). Core affect, prototypical emotional episodes, and other things called emotion: Dissecting the elephant. *Journal of Personality and Social Psychology*, 76, 805-819.

- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69, 719-727.
- Senik, C. (2009). Direct evidence on income comparisons and their welfare effects. *Journal of Economic Behavior & Organization*, 72, 408-424
- Sheldon, K. M., & Elliot, A. (1999). Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. Journal of Personality and Social Psychology, 76, 482-497.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7, 422-445.
- Snibbe, A. C., & Markus, H. R. (2005). You can't always get what you want: Educational attainment, agency, and choice. *Journal* of Personality and Social Psychology, 88, 703-720.
- Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a causal chain: Why experiments are often more effective than mediational analyses in examining psychological processes. *Journal of Personality and Social Psychology*, 89, 845-851.
- Tay, L., & Diener, E. (2011). Needs and subjective wellbeing around the world. *Journal of Personality and Social Psychology*, 101, 354-365.
- Tost, L. P. (2015). When, why, and how do powerholders "feel the power"? Examining the links between structural and psychological power and reviving the connection between power and responsibility. *Research in Organizational Behavior*, 35, 29-56.
- Tost, L. P., Gino, F., & Larrick, R. P. (2013). When power makes others speechless: The negative impact of leader power on team performance. *Academy of Management Journal*, *56*, 1465-1486.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.
- Waytz, A., Chou, E. Y., Magee, J. C., & Galinsky, A. D. (2015).
  Not so lonely at the top: The relationship between power and loneliness. *Organizational Behavior and Human Decision Processes*, 130, 69-78.
- Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal* of Occupational Health Psychology, 5, 84-94.
- Yukl, G., & Falbe, C. M. (1991). Importance of different power sources in downward and lateral relations. *Journal of Applied Psychology*, 76, 416-423.