The Costs to Life Satisfaction of Impression Management: The Sense of Control and Loneliness as Mediators

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Abstract

Impression management, or self-presentation, prevails in our daily lives. However, whether it enhances individuals' happiness remains underexplored. This paper examines the relationship between impression management and life satisfaction, and whether the sense of control and loneliness mediate this relationship. Using original survey data, we found a negative association between impression management and life satisfaction. In addition, the association was fully mediated by the sense of control and loneliness. The study contributes to the literature on quality of life by highlighting the negative effect of impression management in predicting individuals' life satisfaction. Implications of the findings for research and practice are discussed.

Keywords: impression management; sense of control; loneliness; life satisfaction

1 Introduction

Impression management is the process by which people manage the impressions that others form of them (Leary & Kowalski 1990). The impression that one gives to other people plays a pivotal role in determining how they are perceived and evaluated by others. Therefore, some people pay particularly strong attention to maintain a positive public image in order to avoid negative evaluations against them (Leary & Kowalski 1990; Zettler et al. 2015).

A body of literature has focused on impression management, given its important role in social life. The importance of impression management is well documented in different research areas, such as interpersonal relationships (Tetlock & Manstead 1985), conformity (Schlosser 2009), and job performance appraisal (Wayne & Kacmar 1991). Another stream of research identifies the antecedents of impression management. It is believed that one's public self-consciousness, which is defined as a person's awareness of the presence of an audience, boosts impression management motive (Fenigstein 1979; Morrison & Bies 1991). Similarly, self-monitoring reflects social appropriateness-directed self-observation, hence it is positively related with impression management (Deluga 1991).

Recent research has delved into the behavioral consequences of impression management. Mixed evidence has been found that both benefits and risks can be brought by impression management (Rudman 1998; Turnley & Bolino 2001). However, these studies do not explore the possible impact of impression management on subjective well-being. In particular, it is unclear in the literature how impression management influences life satisfaction. On one hand, individuals who manage their impressions can enjoy and benefit from possessing a positive social image (Ashworth et al. 2005; Chen et al. 1996; Jain 2012). But on the other hand, they also have to expend much effort in this process, which may be laborious and stressful. In some cases, impression management may even backfire and be harmful, such that individuals who aim to be regarded as friendly or capable through impression management turn out to be taken as flatterers or boasters, respectively (Bolino et al. 2016; Jones & Pittman 1982).

To fill this gap, we investigate the effect of impression management on life satisfaction, which serves as a central component of subjective well-being (Diener et al. 1985). We also discuss the underlying mechanism accounting for this effect. Specifically, we test how impression management affects the sense of control and loneliness, which in turn influence life satisfaction.

This paper contributes to the literature in three ways. First, though mixed and indirect support for how impression management affects life satisfaction is available (Ashworth et al. 2005; Bolino et al. 2016), there is presently little research examining the impact of impression management on life satisfaction. Our research fills this gap by showing that impression management is associated with lower life satisfaction. This finding makes a significant contribution to the impression management and life satisfaction literature by revealing the well-being lost due to impression management. Second, we empirically demonstrate that the effect of impression management on life satisfaction takes place through the sense of control. So we add to the literature

documenting the antecedents and consequences of the sense of control (Infurna et al. 2011; Kouchaki et al. 2014). Third, loneliness is regarded as the passive influence of social events, such as social exclusion (Twenge et al. 2003). But we propose that impression management, as a proactive behavior, can also make one lonely. Thus we contribute to the loneliness literature by bridging impression management and loneliness.

The next section reviews the extant literature on impression management, the sense of control, loneliness, and life satisfaction, and develops a series of hypotheses on how impression management affects life satisfaction. This is followed by a section on the data and methods used. The fourth section presents empirical findings related to the hypotheses. The penultimate section discusses the findings, and the final section concludes.

2 Literature review and hypothesis development

2.1 Impression management and life satisfaction

Impression management has been discussed in the literature for several decades. Researchers have identified some factors that influence impression management. For example, Berinsky (2004) finds that demographic variables including gender and age are associated with individuals' impression management; specifically, the result from a random digit-dial survey of 518 Americans indicated that females and those older in age scored higher on the impression management scale. Alexander and Knight (1971) propose that social interactions require self-monitoring, which in turn facilitates impression management behavior. Furthermore, self-monitoring not only promotes impression management generally, but also affects the specific strategies people use when managing their impressions (Rosenfeld et al. 1995; Turnley & Bolino 2001).

More recently, the behavioral consequences of impression management have drawn the increasing attention of researchers in various fields. Krämer and Winter (2008) propose that impression management is an important motive for those who actively participate in social networking sites (SNS); such that SNS users' self-efficacy pertaining to impression management is positively related to the number of virtual friends they have. Impression management is also influential for consumers, who intentionally balance their shopping basket compositions in order to maintain positive impressions (Blair & Roese 2013). In an organizational context, Liu et al. (2015) investigate how employees' impression management and learning goal orientation jointly affect their creativity and mentors' provision of mentoring functions.

There is little empirical evidence showing that impression management is negatively associated with life satisfaction. Nonetheless, some existing research has shed an initial light on this relationship. For instance, impression management is found to be negatively associated with a supervisor's evaluation of job performance (Harris et al. 2007), which is a key predictor of job and life satisfaction of subordinates (Bono & Judge 2003). Similarly, Impression managers fear of negative evaluations that spoil social image, and such fear has a negative impact on psychological well-being (Christopher & Schlenker 2004). Furthermore, Leary et al. (1994) argues that people are more likely to be under psychological pressure if they are concerned too much with

what others think of them, which can even increase health risks related to cancer, HIV, and substance abuse. Consistent with this line of research, we hypothesize that impression management damages life satisfaction.

Hypothesis 1: Impression management is negatively related to life satisfaction.

2.2 Impression management, the sense of control, and loneliness

The sense of control, also known as perceived control, refers to the subjective expectations about one's ability to exert influence over life circumstances and outcomes (Lachman et al. 2011). We propose that impression management undermines one's sense of control because it requires one to create a positive image on others, which may be essentially difficult to do. Specifically, the difficulties in controlling the results of impression management manifest in two ways. First, it is almost impossible always to avoid making mistakes that may damage one's public image, even if one endeavors to do so (Leary et al. 1994). For example, when consumers anticipate feeling embarrassed by a purchase, they usually make an extra effort, for instance, purchasing additional products to prevent their impressions from being spoiled. Ironically, these additional purchases serving as remedies will backfire and exacerbate embarrassment only if they complement the undesired identity communicated (Blair & Roese 2013). Similarly, for employees who are not politically skilled, impression management creates a more undesirable image in their supervisors' eyes (Harris et al. 2007). Second, there are discrepancies between people's perceptions: certain behavior in line with the norm in one's view may be regarded as inappropriate by others (Dubois 1988). That is to say, the impression management may be an illusion. Attempts will be in vain, if one's criterion is inconsistent with others'. For instance, supplication, an impression management tactic that is used to be perceived as needy, is judged as incompetent by individuals who do not consider being needy as a positive trait (Bolino et al. 2016; Jones & Pittman 1982).

Furthermore, impression management can make people feel lonely. We propose two explanations that account for this effect, the first of which is that impression management reduces the feeling of social support. When managing impression, one has to spare no effort in meeting others' evaluative standards (Goffman 1959; Leary et al. 1994); while little support from the others can be offered to them. Consequently, lacking social support leads to loneliness (Sarason et al. 1986). Besides, both impression management and social interaction are complicated and time-consuming tasks (Gowler & Legge 1989; Wang & Hamilton 2012). The more time and effort one spends on impression management, the less time is left for social networking, thus making the person have fewer friends and feel lonelier. Therefore, we propose the following hypothesis.

Hypothesis 2a: Impression management is negatively related to the sense of control.

Hypothesis 2b: Impression management is positively related to loneliness.

2.3 The mediating role of the sense of control and loneliness

The above analyses have discussed the influence of impression management on the sense of control and loneliness. To further address the mediating effect, we need to identify the relationship between the sense of control, loneliness, and life satisfaction.

A high sense of control means a great deal of command and little perceived constraints (Lachman & Weaver 1998). People have a general need for personal control, thereby striving to restore control when it is threatened or lost (Inesi et al. 2011). Because the sense of control is indispensable in daily life, it is no surprise that its positive relationship with life satisfaction has received convergent support in different studies (Lachman 2006; Lachman & Weaver 1998; Larson 1989).

In contrast, loneliness is an aversive state characterized by pessimism and depression (Russell et al. 1984; Zhou et al. 2008). This is because humans are social animals, and they have a fundamental need to seek and maintain relationships with others (Molden et al. 2009; Twenge et al. 2003). If social connectedness is absent (for example, when being socially excluded), one will suffer from loneliness. Loneliness causes a series of negative consequences. It triggers negative emotions, including anxiety and depression (Fontaine et al. 2009). Loneliness has also been found to be associated with decreased self-esteem (Kapıkıran 2013). Moreover, lonely people's social behavior can be distorted. Research indicates that people suffering from loneliness have social skills deficits (Jones et al. 1982) and improper patterns of self-disclosure (Solano et al. 1982). The aversion of loneliness is also self-evident by the compensatory or reactance responses that people adopt to cope with it, such as impulsive consumption (Sinha & Wang 2013), decreased prosocial behavior, (Twenge et al. 2007), and increased self-defeating behavior (Twenge et al. 2002). Therefore, we propose the following hypothesis:

Hypothesis 3a: The sense of control mediates the relationship between impression management and life satisfaction.

Hypothesis 3b: Loneliness mediates the relationship between impression management and life satisfaction.

3 Data and method

3.1 Participants and procedures

We collected original data from an online survey of 316 Chinese adults drawn from a national sampling frame. Before the survey, we showed the participants a cover letter which explained the objectives of this research and guaranteed anonymity. After completing the questionnaire, they were thanked for their participation and given monetary payment. In our sample, 195 respondents (61.7%) and 121 respondents (38.3%) were female and male respectively. 249 respondents (79.8%) were aged between 18 and 35 years old. 279 respondents' (89.5%) monthly income ranged from 2000 to 6000 Yuan. In terms of education, 98.7% of the participants had a college degree or higher. Also, 97.5% of them had been employed by their company for no less than four years.

3.2 Measures of constructs

3.2.1 Impression management

We assessed impression management by adapting the Marlowe-Crowne Form A scale with eleven items ($\alpha = .76$) in a true/false format (Reynolds 1982), which is one of the most commonly used scales in measuring impression management (Hunsley et al. 1996; Uziel 2010), and is shown to fit better than the original scale (Loo & Thorpe

2000). Sample items include "It is sometimes hard for me to go on with my work if I am not encouraged" and "No matter who I'm talking to, I'm always a good listener".

3.2.2 The sense of control

We used twelve items adapted from Lachman and Weaver (1998) to create this measure (α = .82). Participants were asked to indicate the extent to which each of the statements described them using a seven-point scale (1 = strongly disagree; 7 = strongly agree). Sample items are "When I really want to do something, I usually find a way to succeed at it" and "I often feel helpless in dealing with the problems of life".

3.2.3 Loneliness

We used Russell's (1996) UCLA Loneliness Scale to assess participants' loneliness (α = .89). This scale is widely used and has well-established reliability and validity in different contexts. On a four-point scale ranging from 1, "never," to 4, "always," participants rated how often they felt the way described. Sample items are "How often do you feel that you lack companionship" and "How often do you feel that there is no one you can turn to".

3.2.4 Life satisfaction

Life satisfaction was measured using a scale developed by Diener et al. (1985). On a seven-point scale (1 = strongly disagree; 7 = strongly agree), participants indicated their agreement with each item. Items include "In most ways my life is close to my ideal," and "The conditions of my life are excellent." We averaged scale items to create a composite score for life satisfaction (α= .90).

3.2.5 Control variables

Following existing studies, age, gender, education, income, and job tenure were included as control variables (Howell & Howell 2008; Judge & Watanabe 1993; Oishi et al. 1999).

We created the Chinese versions of all measures by following commonly used translation / back translation procedures (Brislin 1980). The measures were first translated from English to Chinese by a bilingual, native-born Chinese, and then translated back to English by another native-born bilingual speaker who was not familiar with the original version of the measures. Discrepancies between the original and the back-translated versions were discussed and resolved by joint agreement of the translators.

4 Results

4.1 Correlations among study variables

Table 1 presents the descriptive statistics and bivariate correlations among the different variables. In line with our hypotheses, impression management was negatively associated with life satisfaction ($r = -.13$, $p < .05$) and the sense of control ($r = -.32$, $p < .01$); whereas it was positively associated with loneliness ($r = .26$, $p < .01$). Life satisfaction was positively associated with the sense of control ($r = .40$, $p < .01$) and negatively associated with loneliness ($r = -.46$, $p < .01$).

Insert Table 1 about here

4.2 Measurement model

Because the scales of the constructs contained many items, all items for assessing the study variables were aggregated into parcels by following the parceling procedure that averaged lower loaded items with higher loaded ones, and thus minimized the loading differences among the manifest variables (Little et al. 2002). In the case of multidimensional scales (i.e., loneliness and the sense of control), we created one parcel for each dimension. The number of indicators was thereby reduced to fifteen: impression management and the sense of control had four indicators each; while loneliness had five indicators; and life satisfaction had two indicators.

Insert Table 2 about here

Because several constructs in our study were conceptually related, we used LISREL8.8 to perform a series of CFAs to verify their distinctiveness. Four indicators of fit were used to assess the models we tested, including chi-square-degrees of freedom ratio (χ^2 / df), comparative fit index (CFI; Bentler 1990), non-normed fit index (NNFI; Bentler & Bonett 1980), and root mean square error of approximation (RMSEA; Browne & Cudeck 1993). A value of 3 or less for χ^2 / df indicates acceptable fit (Hinkin 1998). A value of CFI and NNFI in the upper .90s indicates good fit (Bentler & Bonett 1980); whereas the value of RMSEA represents discrepancy, so it is in inverse proportion to the model fit. As suggested by Browne and Cudeck (1993), .08 suggests a reasonable fit of the model to the data.

Table 2 presents the results. As shown, the baseline four-factor model yielded the best fit indexes ($\chi^2 = 216.70$; $df = 84$; CFI = .96; NNFI = .96; RMSEA = .07). We also tested five alternative models: Model 1 was a three-factor model with impression management merged with the sense of control to form a single factor; Model 2 was another three-factor model with impression management merged with loneliness to form a single factor. Models 3 and 4 were two distinct three-factor models in which the sense of control and loneliness, and the sense of control and life satisfaction were combined into one factor. In Model 5, loneliness and life satisfaction were combined

into one factor. These alternative models exhibited a significantly poorer fit than the baseline model, thus providing clear evidence of the construct's distinctiveness.

4.3 Structural model

To test our hypotheses, we used SEM methods implemented in LISREL8.8 and compared the hypothetical model with the competing ones. Our baseline model included the paths from impression management to life satisfaction, the sense of control, and loneliness, as well as paths from the sense of control and loneliness to life satisfaction. In contrast, we omitted the path from impression management to loneliness and the path from loneliness to life satisfaction in Model 2. In Model 3, the indirect effect of impression management on life satisfaction through the sense of control was cut out. Model 4 depicted that impression management only had main effect on life satisfaction. We included all the control variables in these four models, and summarized the results in Table 3. It reveals that the baseline model fitted the data well ($\chi^2 = 415.67$, $df = 155$; CFI= .94, NNFI= .93, RMSEA= .07); whereas models 2–4 exhibited a significantly poorer fit compared with the baseline one, manifested by the significant chi-square difference tests (Model 2: $\Delta\chi^2(2) = 32.58$, $p < .01$; Model 3: $\Delta\chi^2(2) = 13.16$, $p < .01$; Model 4: $\Delta\chi^2(1) = 32.58$, $p < .01$) and model fit indexes.

Insert Table 3 about here

Figure 1 displays the standardized path coefficients of the baseline model. Impression management did not significantly relate to life satisfaction ($\beta = -.01$, $p > .90$). However, the path coefficients between impression management and the sense of control ($\beta = -.29$, $p < .01$) and loneliness ($\beta = .34$, $p < .01$) were both significant, supporting Hypothesis 2a and 2b respectively. Moreover, paths to life satisfaction from the sense of control ($\beta = .17$, $p < .05$) and loneliness ($\beta = -.39$, $p < .01$) were both significant in the predicted directions. Because the mediating effect of the sense of control and loneliness received evidence, Hypothesis 3a and 3b were supported.

Insert Figure 1 about here

To further test the mediation hypotheses, we used bootstrapping procedures that generated a sample size of 5,000 (Hayes 2013). As illustrated in Table 4, the indirect effects of impression management on life satisfaction through the sense of control and loneliness were both significant, because their 95% confidence intervals both excluded zero. Similarly, the direct effects of impression management on the sense of control and loneliness, the direct effect of the sense of control on life satisfaction, and the direct effect of loneliness on life satisfaction were all significant. Taken together, the data supported our hypotheses.

Insert Table 4 about here
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5 Discussion

The present research examines the influence of impression management on people's satisfaction with life. It also reveals that the sense of control and loneliness mediate this relationship. The empirical results from original survey data supported our hypotheses. Specifically, the correlational analyses found that impression management was negatively related to life satisfaction and the sense of control; whereas it was positively associated with loneliness. In addition, the sense of control and loneliness was positively and negatively related to life satisfaction, respectively. We obtained further support from SEM results: the full mediation model indicated that impression management affected the sense of control and loneliness, which in turn influenced life satisfaction. Finally, the mediation received robust and convergent evidence form the bootstrapping analyses.

Living a good life is important for most individuals (Abbott et al. 2016; Cikrikci & Odaci 2016). Therefore, our research has several practical implications. Impression management is a common action for many people. To present a good image to others, they usually do their utmost. However, the findings in this paper indicate that a good impression manager does not necessarily have a good life; in fact, the reverse is true. This result would encourage people who take happiness and well-being as ultimate goals not to do too much impression management work. In other words, if one wants to live a happy life, they should not care about the impressions others hold of them. In addition, we also note that impression management impedes life satisfaction through increasing the loss of sense of control and loneliness. So, if impression management is inevitable in certain social contexts, individuals may prevent their life satisfaction from decreasing by building new social relationships and participating in social activities to avoid feeling lonely, or by gaining status and reducing uncertainty to enhance sense of control.

5.1 Limitations and future directions

This study has three limitations that point to research directions in the future. First, the research was conducted in China, whose cultures and values are quite special and unique (Cheung et al. 2001), so the generalization of the empirical results has yet to be verified. Second, causality is usually an open question in cross-sectional studies (Knemeyer & Naylor 2011; Newcomb & Felix-Ortiz 1992). Future research may further strengthen the causal inferences by adopting longitudinal or experimental designs. Finally, we did not investigate the boundary conditions of the effect. It is possible that impression management no longer decreases life satisfaction under some circumstances. For example, since powerful individuals have not only tangible control over others and resources (Guinote et al. 2015; Jouffre 2015), but also better social connections and relationships (Waytz et al. 2015), the mechanism through which impression management negatively influences life satisfaction is disrupted. Consequently, it is entirely possible for holders of power to maintain a good life even if they frequently engage in impression management.

5.2 Conclusions

In conclusion, this research investigates how impression management influences life satisfaction. Specifically, the results show that impression management is negatively related to life satisfaction, and the sense of control and loneliness fully

mediate this effect. These results identify impression management as an indicator of life satisfaction, and illustrate the underlying mechanism of this relationship, and are theoretically important and practically useful.

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References

Ashworth, L., Darke, P. R., & Schaller, M. (2005). No one wants to look cheap: Trade-offs between social disincentives and the economic and psychological incentives to redeem coupons. *Journal of Consumer Psychology*, *15*, 295–306. http://dx.doi.org/10.1207/s15327663jcp1504_4

Abbott, P., Wallace, C., Lin, K., & Haerpfer, C. (2016). The quality of society and life satisfaction in China. *Social Indicators Research*, *127*, 653–670. http://dx.doi.org/10.1007/s11205-015-0989-3

Alexander, C. N. Jr., & Knight, G. W. (1971). Situated identities and social psychological experimentation. *Sociometry*, *34*, 65–82. http://dx.doi.org/10.2307/2786351

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, *107*, 238–246. http://dx.doi.org/10.1037/0033-2909.107.2.238

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, *88*, 588–606. http://dx.doi. org/10.1037/0033-2909.88.3.588

Berinsky, A. J. (2004). Can we talk? Self-presentation and the survey response. *Political Psychology*, *25*, 643–659. http://dx.doi.org/10.1111/j.1467-9221.2004.00391.x

Blair, S., & Roese, N. J. (2013). Balancing the basket: The role of shopping basket composition in embarrassment. *Journal of Consumer Research*, *40*, 676–691. http://dx.doi.org/10.1086/671761

Bolino, M., Long, D., & Turnley, W. (2016). Impression management in organizations: Critical questions, answers, and areas for future research. *Annual Review of Organizational Psychology and Organizational Behavior*, 3(1), 377–406. http://dx.doi.org/10.1146/annurev-orgpsych-041015-062337

Bono, J. E., & Judge, T. A. (2003). Core self-evaluations: A review of the trait and its role in job satisfaction and job performance. *European Journal of Personality*, *17*, 5–18. http://dx.doi.org/10.1002/per.481

Brislin, R. W. (1980). Translation and content analysis of oral and written material. In H. C. Triandis & J. W. Berry (Eds.), *Handbook of cross-cultural psychology* (Vol. 2, pp. 389–444). Boston, MA: Allyn & Bacon.

Browne, M. W. & Cudeck, R. 1993. Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Newbury Park, CA: Sage.

Chen, S., Shechter, D., & Chaiken, S. (1996). Getting at the truth or getting along: Accuracy-versus impression-motivated heuristic and systematic processing. *Journal of Personality and Social Psychology*, 71, 262–275. http://dx.doi.org/10.1037//00 22-3514.71.2.262

Cheung, F. M., Leung, K., Zhang, J. X., Sun, H. F., Gan, Y. Q., Song, W. Z., & Xie, D. (2001). Indigenous Chinese personality constructs: Is the five-factor model complete? *Journal of Cross-Cultural Psychology*, *32*, 407–433. http://dx.doi.org/10.1177/ 0022022101032004003

Christopher, A. N., & Schlenker, B. R. (2004). Materialism and affect: The role of self-presentational concerns. *Journal of Social and Clinical Psychology*, *23*, 260-272. http://dx.doi.org/10.1521/jscp.23.2.260.31022

Cikrikci, Ö., & Odaci, H. (2016). The determinants of life satisfaction among adolescents: The role of metacognitive awareness and self-efficacy. *Social Indicators Research*, 125, 977–990. http://dx.doi.org/10.1007/s11205-015-0861-5

Deluga, R. J. (1991). The relationship of upward-influencing behavior with subordinate-impression management characteristics. *Journal of Applied Social Psychology*, *21*, 1145–1160. http://dx.doi.org/10.1111/j.1559-1816.1991.tb00463.x

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, *49*, 71–75. http://dx.doi.org/10.1207/s15327752jpa4901_13

Dubois, N. (1988). The norm of internality: Social valorization of internal explanations of behavior and reinforcements in young people. *Journal of Social Psychology*, *128*, 431–439. http://dx.doi.org/10.1080/00224545.1988.9713763

Fenigstein, A. (1979). Self-consciousness, self-attention, and social interaction. *Journal of Personality and Social Psychology*, *37*, 75–86. http://dx.doi.org/10.1037/00 22-3514.37.1.75

Fontaine, R. G., Yang, C., Burks, V. S., Dodge, K. A., Price, J. M., Pettit, G. S., & Bates, J. E. (2009). Loneliness as a partial mediator of the relation between low social preference in childhood and anxious / depressed symptoms in adolescence. *Development and Psychopathology*, *21*, 479–491. http://dx.doi.org/10.1017/s0954579409000261

Goffman, E. (1959). *Presentation of self in everyday life*. New York, NY: Doubleday Anchor.

Gowler, D., & Legge, K. (1989). 21 Rhetoric in bureaucratic careers: Managing the meaning of management success. In M. B. Arthur, D. T. Hall, & B. S. Lawrence (Eds.), *Handbook of career theory* (pp. 437–453). Cambridge: Cambridge University Press.

Guinote, A., Cotzia, I., Sandhu, S., & Siwa, P. (2015). Social status modulates prosocial behavior and egalitarianism in preschool children and adults. *Proceedings of the National Academy of Sciences*, *112*, 731–736. http://dx.doi.org/10.1073/pnas.1414550112

Harris, K. J., Kacmar, K. M., Zivnuska, S., & Shaw, J. D. (2007). The impact of political skill on impression management effectiveness. *Journal of Applied Psychology*, *92*, 278–285. http://dx.doi.org/10.1037/0021-9010.92.1.278

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford.

Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, *1*, 104–121. http://dx.doi.org/10.1177/109442819800100106

Howell, R. T., & Howell, C. J. (2008). The relation of economic status to subjective well-being in developing countries: A meta-analysis. *Psychological Bulletin*, *134*, 536–560. http://dx.doi.org/10.1037/0033-2909.134.4.536

Hunsley, J., Vito, D., Pinsent, C., James, S., & Lefebvre, M. (1996). Are self-report measures of dyadic relationships influenced by impression management biases? *Journal of Family Psychology*, *10*, 322–330. http://dx.doi.org/10.1037/0893-3200.10.3.322

Inesi, M. E., Botti, S., Dubois, D., Rucker, D. D., & Galinsky, A. D. (2011). Power and choice: Their dynamic interplay in quenching the thirst for personal control. *Psychological Science*, *22*, 1042–1048. http://dx.doi.org/10.1177/0956797611413936

Infurna, F. J., Gerstorf, D., Ram, N., Schupp, J., & Wagner, G. G. (2011). Long-term antecedents and outcomes of perceived control. *Psychology and Aging*, *26*, 559–575. http://dx.doi.org/10.1037/a0022890

Jain, A. K. (2012). Does emotional intelligence predict impression management? *Journal of Organizational Culture, Communication and Conflict*, *16*, 1–14. http://dx.doi.o rg/10.19070/2332-3000-1500014

Jones, E. E., & Pittman, T. (1982). Toward a general theory of strategic self-presentation. In J. Suls (Ed.), *Psychological perspectives on the self* (Vol. 1, pp. 231–262). Hillsdale, NJ: Erlbaum, Inc.

Jones, W. H., Hobbs, S. A., & Hockenbury, D. (1982). Loneliness and social skill deficits. *Journal of Personality and Social Psychology*, *42*, 682–689. http://dx.doi.or g/10.1037/0022-3514.42.4.682

Jouffre, S. (2015). Power modulates over-reliance on false cardiac arousal when judging target attractiveness: The powerful are more centered on their own false arousal than the powerless. *Personality and Social Psychology Bulletin*, 41, 116–126. http://dx.d oi.org/10.1177/0146167214559718

Judge, T. A., & Watanabe, S. (1993). Another look at the job satisfaction-life satisfaction relationship. *Journal of Applied Psychology*, *78*, 939–948. http://dx.doi.org/10.103 7/0021-9010.78.6.939

Kapıkıran, Ş. (2013). Loneliness and life satisfaction in Turkish early adolescents: The mediating role of self esteem and social support. *Social Indicators Research*, *111*, 617–632. http://dx.doi.org/10.1007/s11205-012-0024-x

Knemeyer, A. M., & Naylor, R. W. (2011). Using behavioral experiments to expand our horizons and deepen our understanding of logistics and supply chain decision making. *Journal of Business Logistics*, *32*, 296–302. http://dx.doi.org/10.11 11/j.0000-0000.2011.01025.x

Kouchaki, M., Oveis, C., & Gino, F. (2014). Guilt enhances the sense of control and drives risky judgments. *Journal of Experimental Psychology: General*, *143*, 2103–2110. http://dx.doi.org/10.1037/a0037932

Krämer, N. C., & Winter, S. (2008). Impression management 2.0: The relationship of self-esteem, extraversion, self-efficacy, and self-presentation within social networking sites. *Journal of Media Psychology*, *20*, 106–116. http://dx.doi.org /10.1027/1864-1105.20.3.106

Lachman, M. E. (2006). Perceived control over aging-related declines adaptive beliefs and behaviors. *Current Directions in Psychological Science*, *15*, 282–286. http://d x.doi.org/10.1111/j.1467-8721.2006.00453.x

Lachman, M. E., & Weaver, S. L. (1998). The sense of control as a moderator of social class differences in health and well-being. *Journal of Personality and Social Psychology*, *74*, 763–773. http://dx.doi.org/10.1037/0022-3514.74.3.763

Lachman, M. E., Neupert, S. D., & Agrigoroaei, S. (2011). The relevance of a sense of control for health and aging. In K. W. Schaie & S. L. Willis (Eds.), *Handbook of the psychology of aging* (7th ed.). (pp. 175–190). Boston, MA: Academic Press.

Larson, R. (1989). Is feeling "in control" related to happiness in daily life? *Psychological Reports*, *64*, 775–784. http://dx.doi.org/10.2466/pr0.1989.64.3.775

Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological Bulletin*, 107, 34–47. http://dx.doi.o rg/10.1037/0033-2909.107.1.34

Leary, M. R., Tchividijian, L. R., & Kraxberger, B. E. (1994). Self-presentation can be hazardous to your health: Impression management and health risk. *Health Psychology*, *13*, 461–470. http://dx.doi.org/10.1037/0278-6133.13.6.461

Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling*, *9*, 151–173. http://dx.doi.org/10.1207/s15328007sem0902_1

Liu, D., Wang, S., & Wayne, S. J. (2015). Is being a good learner enough? An examination of the interplay between learning goal orientation and impression management tactics on creativity. *Personnel Psychology*, *68*, 109–142. http://dx.doi.org/10.1111/peps.12064

Loo, R., & Thorpe, K. (2000). Confirmatory factor analyses of the full and short versions of the Marlowe-Crowne Social Desirability Scale. *Journal of Social Psychology*, *140*, 628–635. http://dx.doi.org/10.1080/00224540009600503

Molden, D. C., Lucas, G. M., Gardner, W. L., Dean, K., & Knowles, M. L. (2009). Motivations for prevention or promotion following social exclusion: Being rejected versus being ignored. *Journal of Personality and Social Psychology*, *96*, 415–431. http://dx.doi.org/10.1037/a0012958

Morrison, E. W., & Bies, R. J. (1991). Impression management in the feedback-seeking process: A literature review and research agenda. *Academy of Management Review*, *16*, 522–541. http://dx.doi.org/10.5465/amr.1991.4279472

Newcomb, M. D., & Felix-Ortiz, M. (1992). Multiple protective and risk factors for drug use and abuse: Cross-sectional and prospective findings. *Journal of Personality and Social Psychology*, *63*, 280–296. http://dx.doi.org/10.1037/0022-3514.63.2.280

Oishi, S., Diener, E. F., Lucas, R. E., & Suh, E. M. (1999). Cross-cultural variations in predictors of life satisfaction: Perspectives from needs and values. *Personality and Social Psychology Bulletin*, *25*, 980–990. http://dx.doi.org/10.1177/0146167299251 1006

Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical Psychology*, 38, 119–125. http://dx.doi.org/10.1002/1097-4679(198201)38:1%3C119::aid-jclp227 0380118%3E3.0.co;2-i

Rosenfeld, P. R., Giacalone, R. A., & Riordan, C. A. (1995). *Impression management in organizations: Theory, measurement, and practice*. New York, NY: Routledge.

Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and benefits of counterstereotypical impression management. *Journal of Personality and Social Psychology*, *74*, 629–645. http://dx.doi.org/10.1037/0022-3514.74.3.629

Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment*, *66*, 20–40. http://dx.doi.org/10.1207/s15327752jpa6601_2

Russell, D., Cutrona, C. E., Rose, J., & Yurko, K. (1984). Social and emotional loneliness: An examination of Weiss's typology of loneliness. *Journal of Personality and Social Psychology*, *46*, 1313–1321. http://dx.doi.org/10.1037/0022-3514.46.6.1313

Sarason, I. G., Sarason, B. R., & Shearin, E. N. (1986). Social support as an individual difference variable: Its stability, origins, and relational aspects. *Journal of Personality and Social Psychology*, *50*, 845–855. http://dx.doi.org/10.1037//0022 -3514.50.4.845

Schlosser, A. E. (2009). The effect of computer-mediated communication on conformity vs. nonconformity: An impression management perspective. *Journal of Consumer Psychology*, *19*, 374–388. http://dx.doi.org/10.1016/j.jcps.2009.03.005

Shin, D. C., & Johnson, D. M. (1978). Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research*, 5, 475–492. http://dx.doi.org/10.1007/bf 00352944

Sinha, J., & Wang, J. (2013). How time horizon perceptions and relationship deficits affect impulsive consumption. *Journal of Marketing Research*, *50*, 590–605. http://dx.doi.org/10.1509/jmr.11.0246

Solano, C. H., Batten, P. G., & Parish, E. A. (1982). Loneliness and patterns of self-disclosure. *Journal of Personality and Social Psychology*, 43, 524–531. http://dx.doi.org/10.1037/0022-3514.43.3.524

Tetlock, P. E., & Manstead, A. S. (1985). Impression management versus intrapsychic explanations in social psychology: A useful dichotomy? *Psychological Review*, *92*, 59–77. http://dx.doi.org/10.1037/0033-295x.92.1.59

Turnley, W. H., & Bolino, M. C. (2001). Achieving desired images while avoiding undesired images: Exploring the role of self-monitoring in impression management. *Journal of Applied Psychology*, *86*, 351–360. http://dx.doi.org/10.1037/0021-9010.8 6.2.351

Twenge, J. M., Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Bartels, J. M. (2007). Social exclusion decreases prosocial behavior. *Journal of Personality and Social Psychology*, *92*, 56–66. http://dx.doi.org/10.1037/0022-3514.92.1.56

Twenge, J. M., Catanese, K. R., & Baumeister, R. F. (2002). Social exclusion causes self-defeating behavior. *Journal of Personality and Social Psychology*, *83*, 606–615. http://dx.doi.org/10.1037/0022-3514.83.3.606

Twenge, J. M., Catanese, K. R., & Baumeister, R. F. (2003). Social exclusion and the deconstructed state: Time perception, meaninglessness, lethargy, lack of emotion, and self-awareness. *Journal of Personality and Social Psychology*, *85*, 409–423. http://dx.doi.org/10.1037/0022-3514.85.3.409

Uziel, L. (2010). Rethinking social desirability scales from impression management to interpersonally oriented self-control. *Perspectives on Psychological Science*, *5*, 243–262. http://dx.doi.org/10.1177/1745691610369465

Wang, Y., & Hamilton, A. F. C. (2012). Social top-down response modulation (STORM): A model of the control of mimicry in social interaction. *Frontiers in Human Neuroscience*, *6*, 1–10. http://dx.doi.org/10.3389/fnhum.2012.00153

Wayne, S. J., & Kacmar, K. M. (1991). The effects of impression management on the performance appraisal process. *Organizational Behavior and Human Decision Processes*, *48*, 70–88. http://dx.doi.org/10.1016/0749-5978(91)90006-f

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. http://dx.doi.org/10.1016/j.obhdp.20 15.06.002

Zettler, I., Hilbig, B. E., Moshagen, M., & de Vries, R. E. (2015). Dishonest responding or true virtue? A behavioral test of impression management. *Personality and Individual Differences*, *81*, 107–111. http://dx.doi.org/10.1016/j.paid.2014.10.007

Zhou, X., Sedikides, C., Wildschut, T., & Gao, D. G. (2008). Counteracting loneliness: On the restorative function of nostalgia. *Psychological Science*, *19*, 1023–1029. http://dx.doi.org/10.1111/j.1467-9280.2008.02194.x

Table 1 Means, standard deviations, and correlations among all variables [a]

	Mean	s.d.	1	2	3	4	5	6	7	8	9
1. Impression management	1.51	.25	(.76)								
2. Sense of control	4.61	.97	−.32**	(.82)							
3. Loneliness	2.72	.86	.26**	−.43**	(.89)						
4. Life satisfaction	3.81	1.21	−.13*	.40**	−.46**	(.90)					
5. Gender	1.62	.49	−.14*	.15*	−.24**	.14*					
6. Age	2.21	.41	−.11	.08	−.00	.07	−.01				
7. Income	2.68	.85	−.11	.09	.07	.10	−.14*	.29**			
8. Education	3.33	.52	−.02	.07	−.07	.05	−.02	−.11	.06		
9. Job tenure	2.66	.75	−.01	.08	.07	−.03	−.08	.23**	.00	.25**	

Notes:

$N = 316$.

Gender: 1 = male; 2 = female.

Age: 1 = less than 18 years old; 2 = 18–35 years old; 3 = 36–53 years old ; 4 = more than 54 years old.

Income: 1= less than 2000 yuan; 2 = 2000–4000 yuan; 3 = 4001–6000 yuan; 4 = more than 6000 yuan.

Education: 1= high school; 2 = some college; 3 = bachelor's degree; 4 = master's degree or higher.

Job tenure: 1 = less than 1 year; 2 = 2–3 years; 3 = 4–5 years; 4 = more than 6 years.

[*] $p < .05$. [**] $p < .01$.

[a] Internal consistency reliabilities are on the diagonal, in parentheses.

Table 2 Comparison of measurement models for main variables in the study

Model	Factors	df	χ^2	$\Delta\chi^2$	CFI	NNFI	RMSEA
Baseline model	Four factors.	84	216.70	–	.96	.96	.07
Model 1	Three factors: impression management and sense of control were combined into one factor.	87	614.02	397.32[**]	.86	.83	.14
Model 2	Three factors: impression management and loneliness were combined into one factor.	87	597.89	381.19[**]	.86	.83	.15
Model 3	Three factors: sense of control and loneliness were combined into one factor.	87	1076.55	859.85[**]	.74	.68	.19
Model 4	Three factors: sense of control and life satisfaction were combined into one factor.	87	570.91	354.21[**]	.87	.85	.13
Model 5	Three factors: loneliness and life satisfaction were combined into one factor.	87	525.45	308.75[**]	.88	.86	.13

Notes:
$N = 316$.
** $p < .01$.

Table 3 Comparisons of structural equation models

Model specifications	df	χ^2	$\Delta\chi^2$	CFI	NNFI	RMSEA
1. IM → SOC+Loneliness → LS [ab]	155	415.67	–	.94	.93	.07
2. IM → SOC → LS	157	448.25	32.58[**]	.92	.91	.07
3. IM → Loneliness → LS	157	428.83	13.16[**]	.93	.91	.07
4. IM → LS	156	442.16	26.49[**]	.93	.91	.08

Notes:

$N = 316$.

$\Delta\chi^2$ is the change of χ^2 compared with the baseline model.

[**] $p < .01$.

[a] Baseline model.

[b] IM = impression management; SOC = the sense of control; LS = life satisfaction.

Table 4 Direct and indirect effects and 95 % confidence intervals

|	Estimated effect	95% CI [a]
Direct effects		
Impression management → sense of control	−.91**	[−1.31, −.52]
Impression management → loneliness	.96**	[.61, 1.32]
Sense of control → life satisfaction	.30**	[.15, .45]
Loneliness → life satisfaction	−.56**	[−.74, −.39]
Indirect effects		
Impression management → sense of control → life satisfaction	−.27**	[−.44, −.10]
Impression management → loneliness →life satisfaction	−.54**	[−.79, −.27]

Notes:

$N = 316$.

** $p < .01$.

[a] CI = confidence interval.

Figure 1 Path coefficients of the hypothesized model
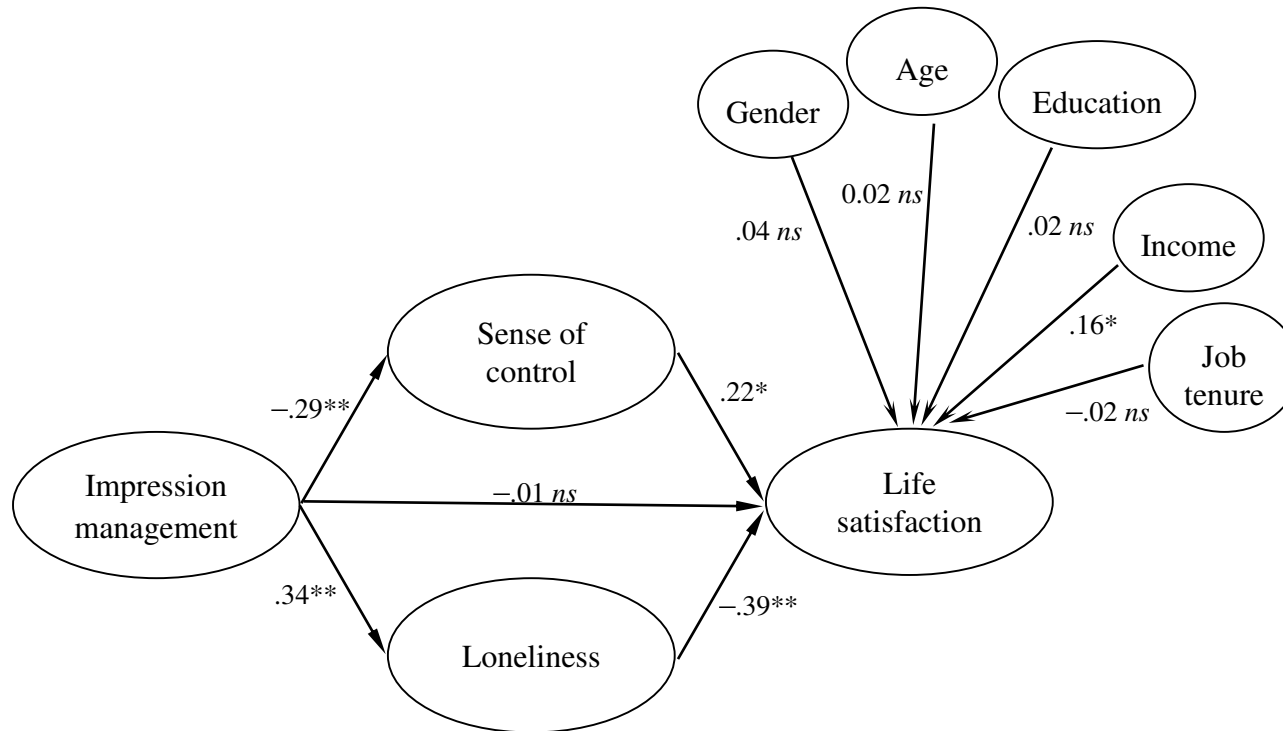
Notes:
N = 316.
Standardized path coefficients are reported here.
[*] *p* < .05. [**] *p* < .01.