



Munich Personal RePEc Archive

# **Achievement Goal and Life Satisfaction: The Mediating Role of Perception of Successful Agency and the Moderating Role of Emotion Reappraisal**

Wang, Wangshuai and Li, Jie and Sun, Gong and Zhang,  
Xin-an and Cheng, Zhiming

Shanghai Jiao Tong University, Shanghai University, Central  
University of Finance and Economics, Shanghai Jiao Tong  
University, Macquarie University

4 August 2016

Online at <https://mpra.ub.uni-muenchen.de/72864/>  
MPRA Paper No. 72864, posted 05 Aug 2016 05:14 UTC

**Achievement Goal and Life Satisfaction: The Mediating Role of Perception of Successful Agency and the Moderating Role of Emotion Reappraisal**

Wangshuai Wang  
Antai College of Economics and Management  
Shanghai Jiao Tong University  
Email: wwssjtu@sjtu.edu.cn

Jie Li  
School of Management  
Shanghai University  
Email: mgmtli@i.shu.edu.cn

Gong Sun  
Department of Marketing  
Central University of Finance and Economics  
Email: sungong1234@163.com

Xin-an Zhang  
Antai College of Economics & Management  
Shanghai Jiao Tong University  
Email: xinanzhang@sjtu.edu.cn

Zhiming Cheng  
Centre for the Health Economy  
Macquarie University  
Email: zhiming.cheng@mq.edu.au

The authors certify that they have the right to deposit the contribution with MPRA

## **Achievement Goal and Life Satisfaction: The Mediating Role of Perception of Successful Agency and the Moderating Role of Emotion Reappraisal**

### **Abstract**

Achievement goal is a cognitive representation that guides behavior to a competence-related future end state. Existing theories and empirical findings imply that achievement goal is potentially related to life satisfaction. However, the relationship between achievement goal and life satisfaction remains relatively unexplored in the psychology literature. In this study we examined how, and when, achievement goal affects life satisfaction, using original survey data from China. The results suggested that achievement goal was positively related to life satisfaction, that the perception of successful agency fully mediated the relationship between achievement goal and life satisfaction, and that emotion reappraisal moderated the relationship between achievement goal and life satisfaction. Our study helps reveal the positive influence of achievement goal on life satisfaction, and provides an understanding of the mechanism and boundary condition of this influence.

**Keywords** achievement goal, perception of successful agency, emotion reappraisal, life satisfaction

## **Introduction**

Achievement goal is defined as “a future-focused cognitive representation that guides behavior to a competence-related end state that the individual is committed to either approach or avoid” (Hulleman, Schrager, Bodmann, & Harackiewicz, 2010, p. 423). In the past three decades there has been a large body of literature on the pivotal role of achievement goal in people’s lives (see Hulleman et al., 2010, for a meta-analytic review). In the earlier literature different types of achievement goals are identified. For instance, individuals can either focus on improvement and development (mastery) or performance in comparison with others (performance; cf. Nicholls, 1984). More recent research proposes four types of achievement goals: mastery approach, mastery avoidance, performance approach, and performance avoidance (Elliot & McGregor, 2001).

Individuals differ in their behaviors and preferences in pursuit of achievement goal. Some people have explicit purposes or strongly desired outcomes, for which they exert effort in achievement situations; whereas others do not have such expectations or ambitions toward personal achievements (Harackiewicz & Sansone, 1991). In addition, one’s age, self-efficacy and perceived social environment are found to be predictors of achievement goal (Anderman & Anderman, 1999; Bong, 2009; Phillips & Gully, 1997).

More recently, attention has been given to the consequences of pursuing achievement goal. For instance, achievement goal can activate intrinsic motivation (Cury, Elliot, Sarrazin, Da Fonseca, & Rufo, 2002). Based on this finding, Lee, Sheldon, and Turban (2003) argue that achievement goal promotes academic performance and enjoyment. In contrast, negative emotions can also be exacerbated by achievement goal due to high expectations, such as anxiety in tests (Flanagan, Putwain, & Caltabiano, 2015).

The existing literature on life satisfaction shows that a person who is more satisfied with life is more diligent, performs better in their job, and has a higher commitment to organization (Efraty, Sirgy, & Claiborne, 1991; Greenhaus, Bedeian, & Mossholder, 1987). More recent research finds that expectation and aspiration are important to job and life satisfaction (Cheng, Wang, & Smyth, 2014; Gao & Smyth, 2010). Similarly, academic goal progress is found to be influential to academic and life satisfaction (Ojeda, Flores, & Navarro, 2011; Singley, Lent, & Sheu, 2010). Keller and Siegrist (2010) suggest that both goal pursuit and life satisfaction are psychological resources.

However, little research has been conducted on the potential relationship between achievement goal and life satisfaction. In particular, it is unclear in the literature that whether achievement goal influences life satisfaction in a positive or negative way. For instance, individuals with high achievement goal can be substantially motivated by mental energy in the face of challenge (Grant & Dweck, 2003), but they also need to make a concerted effort in the potentially stressful and laborious process of pursuing their goals (Senko & Harackiewicz, 2005).

Thanks to the rapid growth of the economy, people are paying more attention to

the improvement of quality of life. To date, life satisfaction's fundamental role and indispensability are acknowledged by worldwide respondents (Diener, Oishi, & Lucas, 2003). Therefore, to help fill the gap in the literature, and to respond to the practical necessity, this study examines the association between achievement goal and life satisfaction. We also investigate why, and when, achievement goal influences life satisfaction by examining the underlying mechanism and boundary condition of the influence.

The next section briefly reviews the literature on the relationships between achievement goal, perception of successful agency, emotional reappraisal and life satisfaction, in order to propose three hypotheses, which are tested using original survey data in later sections. Foreshadowing the results, we find that the effect of achievement goal on life satisfaction is mediated by the perception of successful agency, and moderated by emotion reappraisal.

### **Achievement Goal and Life Satisfaction**

Life satisfaction is a global cognitive judgment across a broad set of activities concerning one's quality of life (Diener et al., 2003; Matud, Bethencourt, & Ibáñez, 2014). Various factors are related to life satisfaction, such as finances (Johnson & Krueger, 2006), family and marital relations (Adams, King, & King, 1996; Cheng & Smyth, in press), and sexual behaviors (Cheng & Smyth, 2015).

Although the direct evidence for the link between achievement goal and life satisfaction is limited, the previous research has provided some indirect support. Individuals have a thirst for sense of control, expecting everything to be in line with the plan (Park & Baumeister, in press). However, there are always discrepancies between expectations and reality. The experiences of hardships often demotivate people and make them feel dissatisfied with life. Importantly, achievement goal provides one with motivation (Pintrich, 2000), which serves as mental energy conducive to overcoming difficulties and obstacles in life (Capa, Audiffren, & Ragot, 2008). Thus, people who set themselves achievement goal are less influenced by these experiences that exert negative effects on life satisfaction.

Furthermore, researchers find that setting achievement goal is helpful to one's educational and occupational performance, such that it predicts better grade at school and upward career mobility (Gould, 1980; Harackiewicz, Barron, Tauer, & Elliot, 2002). The success in academic and job domain boosts self-efficacy and self-esteem (Bachman & O'Malley, 1977; Leary, Tambor, Terdal, & Downs, 1995; Tay, Ang, & Van Dyne, 2006), both of which enhance satisfaction with life (Du, Bernardo & Yeung, 2015; Joseph, Royse, Benitez, & Pekmezi, 2014). Therefore, we propose the following hypothesis:

*Hypothesis 1: Achievement goal is positively correlated with life satisfaction.*

### **Perception of Successful Agency as a Mediator**

Perception of successful agency is a sense of successful determination in pursuing goals, by which hope is fueled (Snyder et al., 1991). Perception of successful agency is conceptually similar to self-efficacy, and they are shown to be positively and

moderately correlated (Magaletta & Oliver, 1999). However, they differ significantly in some ways, such as that successful agency is more future oriented (Snyder et al., 1991). Thus, perception of successful agency is more closely related to achievement goal compared to self-efficacy.

We hypothesize that achievement goal is positively related to perception of successful agency. This is because achievement goal usually leads people to maintain high standards and seek to accomplish difficult tasks (Phillips & Gully, 1997). After making every effort to ensure success, people are likely to hold positive expectations towards the outcomes.

In addition, we propose that perception of successful agency is positively associated with life satisfaction for two reasons. First, perception of successful agency can make one's life more meaningful. Feldman and Snyder (2005) suggest that certain perception per se is actually a component of meaning, because factor analysis shows a single factor underlying the two constructs. People who feel that their life is meaningful report higher satisfaction with life (Park, Park, & Peterson, 2010; Steger, Frazier, Oishi & Kaler, 2006). Second, according to the notion that hope copes with obstacles and enhances meaning in life, some empirical research has revealed the positive relationship between hope and life satisfaction (Bailey, Eng, Frisch, & Snyder, 2007; Bronk, Hill, Lapsley, Talib, & Finch, 2009; O'Sullivan, 2011; Przepiorka, in press). Because perception of successful agency is a dimension of hope, we expect its relationship with life satisfaction to be similar. Based on the above discussion, we hypothesize that:

*Hypothesis 2: Perception of successful agency mediates the relationship between achievement goal and life satisfaction.*

### **Emotion Reappraisal as a Moderator**

Individuals exert considerable control over their emotions, but differ in their use of specific emotion regulation strategies. Of these, the two most widely used strategies are reappraisal and suppression (Gross & John, 2003). Emotion reappraisal is a cognitive change of emotional impact by construing a potentially emotion-eliciting situation. Emotion reappraisal is a much more effective regulation strategy compared with emotion suppression (Gross, 1998; Gross & John, 2003). For example, people who habitually use emotion reappraisal are less likely to be depressed (Feinberg, Willer, Antonenko, & John, 2012), experience greater positive emotion and lesser negative emotion, and have better social functioning (Gross & John, 2003).

Achievement goal promotes one's expectation of the end state, which cannot stay perfect all the time. Failing to meet the goal means that the initial efforts become sunk cost, which leads to decreased self-confidence and increased self-blame. These negative self-cognitions in turn trigger negative and severe emotional reactions (Brown, & Dutton, 1995), such as depression and anxiety (Ellenhorn, 2005; Hewitt & Flett, 1991). Consequently, when emotion reappraisal is low, the negative consequences caused by failure are unable to be adjusted in time. This will lower a person's perceived quality of life. Under such circumstances, the positive relationship between achievement goal and life satisfaction is attenuated. On the contrary, when emotion reappraisal is high, individuals take an optimistic attitude to

negotiate stressful situations, and thus become more immune to the pressure of goal failure (Gross & John, 2003). As a result, their satisfaction with life is still positively correlated with achievement goal. Therefore, we propose the following hypothesis:

*Hypothesis 3: Emotion reappraisal moderates the relationship between achievement goal and life satisfaction.*

## **Method**

### **Participants and Procedures**

We collected original survey data from 225 adults from a national sample in China. They were recruited for monetary reward and were told that their responses would remain confidential. All of the respondents were adults. Among the respondents, 73, 23 and 4 percent of them were 18–35, 36–53 and above 54 years old respectively; 47 percent of the respondents were male. The majority of the sample was well educated: 53, 21 and 6 percent of them held bachelors, masters and PhDs respectively as their highest degrees. With regard to job tenure, 71 percent of the participants had worked in their companies for three or more years.

### **Measures**

We created a Chinese version of a set of measures for achievement goal, emotion reappraisal, perception of successful agency, life satisfaction, and social desirability. In order to ensure accuracy of translation, we followed Brislin's (1986) translation and back-translation procedures. Specifically, the items of the scales were first translated into Chinese by a native Chinese speaker with excellent knowledge of English. Then, this process was reversed by a native English speaker with excellent command of Chinese. For a very small number of items, the back-translation procedure resulted in inconsistencies. But these inconsistencies were resolved in discussion between the two translators and the researchers.

**Achievement Goal** Achievement goal was measured by ten items adapted from Goldberg's (1999) International Personality Item Pool (IPIP), which have been widely used in previous studies and are shown to have good reliability and validity (Hirschfeld, Lawson, & Mossholder, 2004). On a seven-point scale (1 = *not at all characteristic*; 7 = *very characteristic*), participants rated how characteristic each statement best described themselves. Cronbach's alpha for achievement goal was .90.

**Emotion Reappraisal** Emotion reappraisal was assessed using a six-item measure developed by Gross and John (2003), which was a subscale of emotion regulation. Participants indicated their agreement with each item on a seven-point scale (1 = *strongly disagree*; 7 = *strongly agree*). Cronbach's alpha for emotion reappraisal was .95.

**Perception of Successful Agency** We measured perception of successful agency using Snyder et al.'s (1991) scale, a four-item subscale of hope. Participants were asked to evaluate the extent to which each item applied to them on a seven-point scale (1 = *definitely false*; 7 = *definitely true*). Cronbach's alpha for successful agency was .95.

**Life Satisfaction** We assessed life satisfaction using the measures developed by Diener, Emmons, Larsen, and Griffin (1985). On a seven-point scale (1 = *strongly disagree*; 7 = *strongly agree*), participants reported the overall satisfaction with their life under different indicators. Cronbach's alpha for this five-item scale was .93.

**Control Variables** In the survey we also collected information on some important variables that are potentially correlated with life satisfaction such as gender, age, income, education level (Gannon & Ranzijn, 2005; Johnson & Krueger, 2006), job tenure (Adams et al., 1996) and social desirability bias. We used the thirteen true-false format items adapted from Reynolds (1982) to assess social desirability bias. Cronbach's alpha for social desirability bias was .77.

## Results

### Measurement Model Results

To verify the distinctness of variables included in our models, we conducted a series of confirmatory factor analyses. Because our sample size was relatively small, we constructed item parcels in these confirmatory factor analyses. Specifically, four indicators were formed for constructs that contained more than four items by sequentially grouping the highest loading items with the lowest loading ones (Little, Cunningham, Shahar, & Widaman, 2002). After parceling, the total number of indicators decreased to sixteen, because the number of indicators for each construct was four.

-----  
Insert Table 1 about here  
-----

The baseline model contained four factors: achievement goal, emotion reappraisal, perception of successful agency, and life satisfaction. We also examined six alternative models against the baseline model. As shown in Table 1, the results suggested that the baseline model fitted the data reasonably well ( $\chi^2(98) = 348.79$ , CFI = .96, NNFI = .95, RMSEA = .09). The alternative models all exhibited significantly poorer fit than the baseline model. Therefore, we treated the four variables as distinct constructs in later analyses.

### Descriptive Statistics and Correlations

The descriptive statistics and correlations among variables are presented in Table 2. Consistent with our hypotheses, achievement goal had a significant positive correlation with life satisfaction ( $r = .42, p < .01$ ) and perception of successful agency ( $r = .83, p < .01$ ). Perception of successful agency was also significantly related to life satisfaction ( $r = .44, p < .01$ ).

-----  
Insert Table 2 about here  
-----



## Results of Tests of the Hypotheses

We used hierarchical regression for the purposes of hypothesis tests. Independent variables were mean centered to reduce multicollinearity (Cohen, Cohen, West, & Aiken, 2003). Table 3 displays the results of regression analysis for testing Hypothesis 1 (achievement goal is positively related to life satisfaction) and Hypothesis 2 (perception of successful agency mediates the relationship between achievement goal and life satisfaction). The results supported these hypotheses. First, achievement goal was positively, and significantly, related to life satisfaction ( $\beta = .42, p < .01$ ); this supported Hypothesis 1. Second, to test mediation, we followed Baron and Kenny's procedure (1986).

-----  
Insert Table 3 about here  
-----

In Model 1, we regressed successful agency on the control variables and achievement goal. In Model 2, we regressed life satisfaction on the same variables as in Model 1. In Model 3, we regressed life satisfaction on the controls, achievement goal, and successful agency. The results supported Hypothesis 2. First, achievement goal was significantly related to successful agency ( $\beta = .85, p < .01$ ). Second, achievement goal was significantly related to life satisfaction ( $\beta = .42, p < .01$ ). Third, successful agency was significantly related to life satisfaction ( $\beta = .25, p < .01$ ), even after achievement goal was controlled for. In addition, the insignificant coefficient for achievement goal ( $\beta = .20, p > .05$ ) indicated that successful agency completely mediated the relationship between the achievement goal and life satisfaction.

As a robustness check for small samples (Preacher & Hayes, 2008), we adopted bootstrapping to further examine the achievement goal—perception of successful agency—life satisfaction link. A 5,000 resample bootstrap suggested a significant indirect effect via successful agency ( $b = .24, SE = .09, 95\% CI [.06, .42]$ ). This again supported Hypothesis 2.

Table 4 presents the results for the tests of Hypothesis 3. Model 1 contained the control variables only. In Model 2, achievement goal and emotion reappraisal were added. In Model 3 the interaction term between achievement goal and emotion reappraisal was added. In support of Hypothesis 3, the interaction effect of achievement goal and emotion reappraisal was statistically significant ( $\beta = .31, p < .01$ ), and there was a significant change in the multiple squared correlation coefficient ( $\Delta R^2$ ).

-----  
Insert Table 4 about here  
-----

Figure 1 shows that the effect of the two-way interaction between achievement goal and emotion reappraisal was in the expected direction. Following the simple slope analyses in Aiken and West (1991), we found that achievement goal at a high level of emotion reappraisal was positively related to life satisfaction ( $\beta = 1.29, p < .01$ ); whereas achievement goal at a low level of emotion reappraisal was not significantly related to life satisfaction ( $\beta = .10, p > .30$ ).

-----  
Insert Figure 1 about here  
-----

Finally, we employed another statistical analysis which included both successful agency and emotion reappraisal in a single model. Again, we adopted the bootstrapping method as in Model 5 in Hayes (2013). Figure 2 illustrates the coefficients. The interaction term remained significant and the indirect effect of achievement goal on life satisfaction through successful agency was also significant ( $b = .27$ ,  $SE = .09$ , 95% CI [.10, .44]). These results provided convergent support for our hypotheses.

-----  
Insert Figure 2 about here  
-----

## Discussion

This study used original survey data to examine the influence of achievement goal on life satisfaction, the mediating role of perception of successful agency, and the moderating role of emotion reappraisal. Consistent with our predictions, achievement goal is positively associated with life satisfaction. Furthermore, achievement goal is positively correlated with successful agency, which in turn enhances life satisfaction. The simple slope analyses suggest that the positive relationship between achievement goal and life satisfaction hold when emotion reappraisal is high, but not when it is low.

This study contributes to the literature in three ways. First, we contribute to the scant literature on the relationship between achievement goal and life satisfaction. Our findings help fill this gap by showing that achievement goal is positively correlated with life satisfaction. The previous literature provides indirect and mixed evidence for this relationship (Lee et al., 2003; Senko & Harackiewicz, 2005), and we reconcile these differences by empirically testing the relationship between achievement goal and life satisfaction, thus adding to the literature that states the consequences of achievement goal setting (e.g., Barron & Harackiewicz, 2001; Harackiewicz, Barron, Tauer, Carter, & Elliot, 2000; Howell & Watson, 2007; Zhou, 2016). Second, we identify the psychological process through which achievement goal is related to life satisfaction. Therefore we shed some light on the role of perception of successful agency in the relationship between achievement goal and life satisfaction. Extant literature has documented the role of hope in life satisfaction (Bailey et al., 2007; Bron et al., 2009; O'Sullivan, 2011), and we contribute to this body of literature by specifying how successful agency, a dimension of hope, accounts for the impact of achievement goal on life satisfaction. Third, we examine the moderating role of emotion reappraisal to provide a better understanding of the relationship between achievement goal and life satisfaction. This extends the literature pertaining to the emotion reappraisal. Research has elucidated the positive function of emotion reappraisal in buffering anxiety and enhancing well-being (Gross & John, 2003; Smári, Arason, Hafsteinsson, & Ingimarsson, 1997), we further show that emotion reappraisal also plays an important role in affecting the effect of achievement goal on life satisfaction.

The findings offer some valuable insights into ways in which the quality of life can be improved. Given the desire for the high-quality life among many individuals, understanding the enhancers or neutralizers of life satisfaction is useful to practitioners. Since the world's economy keeps going down, more and more people face increased competition. People understand the importance of goal setting in a competitive context, but they are also concerned about the consequences of having an aspiration for achievement. Our research suggests that achievement goal is a positive predictor of life satisfaction since it enhances successful agency perception. Moreover, if individuals suffer from failure in the process of goal pursuit, they need to reappraise their emotion to restore well-being.

This research has several limitations that could be solved in future research. First, caution should be exercised before generalizing our results based on Chinese data to Western societies. The meanings of some constructs may be different in China than in Western societies. Moreover, the validity of the measures after translation needs to be further verified. Second, the study is based on cross-sectional data. Therefore, our findings may not imply causality. In future studies causal inference may be drawn based on longitudinal or experimental data. Third, we only identify one moderator in our model. In future research one may investigate other ways through which the relationship between achievement goal and life satisfaction is moderated. For example, similar to emotion reappraisal, psychological resilience refers to the capacity of positive adaptation in adversity (Ong, Bergeman, Bisconti, & Wallace, 2006). So it is also a potential moderator between achievement goal and life satisfaction. Fourth, we do not explore the relationships between different types of achievement goals and life satisfaction. Previous research has shown that different types of achievement goals have competing effects on performance (Grant & Dweck, 2003), self-regulation (Lee et al., 2003), emotions (Pekrun, Elliot, & Maier, 2009), and reactions to imperfection (Stoeber, Stoll, Pescheck, & Otto, 2008). So it is essential to further test whether each kind of achievement goal has similar or distinct effects on life satisfaction in future research.

In conclusion, through a survey study that contained 225 participants in China, we find that achievement goal is positively related to life satisfaction. Furthermore, the relationship between achievement goal and life satisfaction is mediated by perception of successful agency and moderated by emotion reappraisal. This research provides an understanding of how and when achievement goal boosts life satisfaction, which is theoretically contributive and practically important.

## References

- Adams, G. A., King, L. A., & King, D. W. (1996). Relationships of job and family involvement, family social support, and work-family conflict with job and life satisfaction. *Journal of Applied Psychology, 81*, 411–420. <http://dx.doi.org/10.1037//0021-9010.81.4.411>
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Anderman, L. H., & Anderman, E. M. (1999). Social predictors of changes in students' achievement goal orientations. *Contemporary Educational Psychology, 24*, 21–37. <http://dx.doi.org/10.1006/ceps.1998.0978>
- Bachman, J. G., & O'Malley, P. M. (1977). Self-esteem in young men: A longitudinal analysis of the impact of educational and occupational attainment. *Journal of Personality and Social Psychology, 35*, 365–380. <http://dx.doi.org/10.1037/0022-3514.35.6.365>
- Bailey, T. C., Eng, W., Frisch, M. B., & Snyder, C. R. (2007). Hope and optimism as related to life satisfaction. *The Journal of Positive Psychology, 2*, 168–175. <http://dx.doi.org/10.1080/17439760701409546>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical consideration. *Journal of Personality and Social Psychology, 51*, 1173–1182. <http://dx.doi.org/10.1037//0022-3514.51.6.1173>
- Bong, M. (2009). Age-related differences in achievement goal differentiation. *Journal of Educational Psychology, 101*, 879–896. <http://dx.doi.org/10.1037/a0015945>
- Brislin, R. W. (1986). The wording and translation of research instruments. In W. Lonner & J. Berry (Eds.), *Field methods in cross-cultural research* (pp. 137–164). Beverly Hills, CA: Sage.
- Bronk, K.C., Hill, P. L., Lapsley, D. K., Talib, T. L., & Finch, H. (2009). Purpose, hope, and life satisfaction in three age groups. *The Journal of Positive Psychology, 4*, 500–510. <http://dx.doi.org/10.1080/17439760903271439>
- Brown, J. D., & Dutton, K. A. (1995). The thrill of victory, the complexity of defeat: Self-esteem and people's emotional reactions to success and failure. *Journal of Personality and Social Psychology, 68*, 712–722. <http://dx.doi.org/10.1037/0022-3514.68.4.712>
- Capa, R. L., Audiffren, M., & Ragot, S. (2008). The interactive effect of achievement motivation and task difficulty on mental effort. *International Journal of Psychophysiology, 70*, 144–150. <http://dx.doi.org/10.1016/j.ijpsycho.2008.06.007>
- Cheng, Z., & Smyth, R. (2015). Sex and happiness. *Journal of Economic Behavior and Organization, 112*, 26–32. <http://dx.doi.org/10.1016/j.jebo.2014.12.030>
- Cheng, Z., & Smyth, R. (in press). China's imbalanced sex ratio and satisfaction with marital relations. *Singapore Economic Review*.
- Cheng, Z., Wang, H., & Smyth, R. (2014). Happiness and job satisfaction in urban China: A comparative study of two generations of migrants and urban locals. *Urban Studies, 51*, 2160–2184. <http://dx.doi.org/10.1177/0042098013506042>
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Hillsdale, NJ: Erlbaum
- Cury, F., Elliot, A., Sarrazin, P., Da Fonseca, D., & Rufo, M. (2002). The trichotomous achievement goal model and intrinsic motivation: A sequential mediational analysis. *Journal of Experimental Social Psychology, 38*, 473–481.

- [http://dx.doi.org/10.1016/s0022-1031\(02\)00017-3](http://dx.doi.org/10.1016/s0022-1031(02)00017-3)
- Diener, E. D., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual Review of Psychology*, *54*, 403–425. <http://dx.doi.org/10.1146/annurev.psych.54.1016.01.1450.56>
- Diener, E. D., & Chan, M. Y. (2011). Happy people live longer: Subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being*, *3*, 1–43. <http://dx.doi.org/10.1111/j.1758-0854.2010.01045.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](http://dx.doi.org/10.1207/s15327752jpa4901_13)
- Du, H., Bernardo, A. B., & Yeung, S. S. (2015). Locus-of-hope and life satisfaction: The mediating roles of personal self-esteem and relational self-esteem. *Personality and Individual Differences*, *83*, 228–233. <http://dx.doi.org/10.1016/j.paid.2015.04.026>
- Efraty, D., Sirgy, M. J., & Claiborne, C. B. (1991). The effects of personal alienation on organizational identification: A quality-of-work-life model. *Journal of Business and Psychology*, *6*, 57–78. <http://dx.doi.org/10.1007/bf01013685>
- Ellenhorn, R. (2005). Parasuicidality and patient careerism: Treatment recidivism and the dialectics of failure. *American Journal of Orthopsychiatry*, *75*, 288–303. <http://dx.doi.org/10.1037/0002-9432.75.2.288>
- Elliot, A. J., & McGregor, H. A. (2001). A 2× 2 achievement goal framework. *Journal of Personality and Social Psychology*, *80*, 501–519. <http://dx.doi.org/10.1037/0022-3514.80.3.501>
- Feinberg, M., Willer, R., Antonenko, O., & John, O. P. (2012). Liberating reason from the passions overriding intuitionist moral judgments through emotion reappraisal. *Psychological Science*, *23*, 788–795. <http://dx.doi.org/10.1177/0956797611434747>
- Feldman, D. B., & Snyder, C. R. (2005). Hope and the meaningful life: Theoretical and empirical associations between goal-directed thinking and life meaning. *Journal of Social and Clinical Psychology*, *24*, 401–421. <http://dx.doi.org/10.1521/jscp.24.3.401.65616>
- Flanagan, M. J., Putwain, D. W., & Caltabiano, M. L. (2015). The relationship between goal setting and students' experience of academic test anxiety. *International Journal of School & Educational Psychology*, *3*, 189–201. <http://dx.doi.org/10.1080/21683603.2015.1060910>
- Gannon, N., & Ranzijn, R. (2005). Does emotional intelligence predict unique variance in life satisfaction beyond IQ and personality? *Personality and Individual Differences*, *38*, 1353–1364. <http://dx.doi.org/10.1016/j.paid.2004.09.001>
- Gao, W., & Smyth, R. (2010). What keeps China's migrant workers going? Expectations and happiness among China's floating population. *Journal of the Asia Pacific Economy*, *16*, 163–182. <http://dx.doi.org/10.1080/13547860.2011.564749>
- Goldberg, L. R. (1999). A broad-bandwidth, public-domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. J. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality psychology in Europe* (vol. 7, pp. 7–28). Tilburg, the Netherlands: Tilburg University Press.
- Gould, S. (1980). Need for achievement, career mobility, and the Mexican-American college graduate. *Journal of Vocational Behavior*, *16*, 73–82. [http://dx.doi.org/10.1016/0014-0139\(80\)90017-3](http://dx.doi.org/10.1016/0014-0139(80)90017-3)

1016/0001-8791(80)90039-1

- Grant, H., & Dweck, C. S. (2003). Clarifying achievement goals and their impact. *Journal of Personality and Social Psychology*, *85*, 541-553. <http://dx.doi.org/10.1037/0022-3514.85.3.541>
- Greenhaus, J. H., Bedeian, A. G., & Mossholder, K. W. (1987). Work experiences, job performance, and feelings of personal and family well-being. *Journal of Vocational Behavior*, *31*, 200-215. [http://dx.doi.org/10.1016/0001-8791\(87\)90057-1](http://dx.doi.org/10.1016/0001-8791(87)90057-1)
- Gross, J. J. (1998). Antecedent-and response-focused emotion regulation: Divergent consequences for experience, expression, and physiology. *Journal of Personality and Social Psychology*, *74*, 224-237. <http://dx.doi.org/10.1037/0022-3514.74.1.224>
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, *85*, 348-362. <http://dx.doi.org/10.1037/0022-3514.85.2.348>
- Harackiewicz, J. M., & Sansone, C. (1991). Goals and intrinsic motivation: You can get there from here. *Advances in Motivation and Achievement*, *7*, 21-49.
- Harackiewicz, J. M., Barron, K. E., Tauer, J. M., & Elliot, A. J. (2002). Predicting success in college: A longitudinal study of achievement goals and ability measures as predictors of interest and performance from freshman year through graduation. *Journal of Educational Psychology*, *94*, 562-575. <http://dx.doi.org/10.1037/0022-0663.94.3.562>
- Harackiewicz, J. M., Barron, K. E., Tauer, J. M., Carter, S. M., & Elliot, A. J. (2000). Short-term and long-term consequences of achievement goals: Predicting interest and performance over time. *Journal of Educational Psychology*, *92*, 316-330. <http://dx.doi.org/10.1037/0022-0663.92.2.316>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- Hewitt, P. L., & Flett, G. L. (1991). Dimensions of perfectionism in unipolar depression. *Journal of Abnormal Psychology*, *100*, 98-101. <http://dx.doi.org/10.1037/0021-843x.100.1.98>
- Hirschfeld, R. R., Lawson, L., & Mossholder, K. W. (2004). Moderators of the relationship between cognitive ability and performance: General versus context-specific achievement motivation. *Journal of Applied Social Psychology*, *34*, 2389-2409. <http://dx.doi.org/10.1111/j.1559-1816.2004.tb01983.x>
- Howell, A. J., & Watson, D. C. (2007). Procrastination: Associations with achievement goal orientation and learning strategies. *Personality and Individual Differences*, *43*, 167-178. <http://dx.doi.org/10.1016/j.paid.2006.11.017>
- Hulleman, C. S., Schrager, S. M., Bodmann, S. M., & Harackiewicz, J. M. (2010). A meta-analytic review of achievement goal measures: Different labels for the same constructs or different constructs with similar labels? *Psychological Bulletin*, *136*, 422-449. <http://dx.doi.org/10.1037/a0018947>
- Johnson, W., & Krueger, R. F. (2006). How money buys happiness: Genetic and environmental processes linking finances and life satisfaction. *Journal of Personality and Social Psychology*, *90*, 680-691. <http://dx.doi.org/10.1037/0022-3514.90.4.680>
- Joseph, R. P., Royse, K. E., Benitez, T. J., & Pekmezi, D. W. (2014). Physical activity and quality of life among university students: Exploring self-efficacy, self-esteem, and affect as potential mediators. *Quality of Life Research*, *23*,

- 659–667. <http://dx.doi.org/10.1007/s11136-013-0492-8>
- Keller, C., & Siegrist, M. (2010). Psychological resources and attitudes toward people with physical disabilities. *Journal of Applied Social Psychology, 40*, 389–401. <http://dx.doi.org/10.1111/j.1559-1816.2009.00579.x>
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology, 68*, 518–530. <http://dx.doi.org/10.1037/0022-3514.68.3.518>
- Lee, F. K., Sheldon, K. M., & Turban, D. B. (2003). Personality and the goal-striving process: The influence of achievement goal patterns, goal level, and mental focus on performance and enjoyment. *Journal of Applied Psychology, 88*, 256–265. <http://dx.doi.org/10.1037/0021-9010.88.2.256>
- 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](http://dx.doi.org/10.1207/s15328007sem0902_1)
- Magaletta, P. R., & Oliver, J. M. (1999). The hope construct, will, and ways: Their relations with self-efficacy, optimism, and general well-being. *Journal of Clinical Psychology, 55*, 539–551. [http://dx.doi.org/10.1002/\(sici\)1097-4679\(199905\)55:3C539::aid-jclp2%3E3.0.co;2-g](http://dx.doi.org/10.1002/(sici)1097-4679(199905)55:3C539::aid-jclp2%3E3.0.co;2-g)
- Matud, M. P., Bethencourt, J. M., & Ibáñez, I. (2014). Relevance of gender roles in life satisfaction in adult people. *Personality and Individual Differences, 70*, 206–211. <http://dx.doi.org/10.1016/j.paid.2014.06.046>
- Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review, 91*, 328–346. <http://dx.doi.org/10.1037//0033-295x.91.3.328>
- Ong, A. D., Bergeman, C. S., Bisconti, T. L., & Wallace, K. A. (2006). Psychological resilience, positive emotions, and successful adaptation to stress in later life. *Journal of Personality and Social Psychology, 91*, 730–749. <http://dx.doi.org/10.1037/0022-3514.91.4.730>
- O’Sullivan, G. (2011). The relationship between hope, eustress, self-efficacy, and life satisfaction among undergraduates. *Social Indicators Research, 101*, 155–172. <http://dx.doi.org/10.1007/s11205-010-9662-z>
- Ojeda, L., Flores, L. Y., & Navarro, R. L. (2011). Social cognitive predictors of Mexican American college students’ academic and life satisfaction. *Journal of Counseling Psychology, 58*, 61–71. <http://dx.doi.org/10.1037/a0021687>
- Park, J., & Baumeister, R. F. (in press). Meaning in life and adjustment to daily stressors. *The Journal of Positive Psychology*. <http://dx.doi.org/10.1080/17439760.2016.1209542>
- Park, N., Park, M., & Peterson, C. (2010). When is the search for meaning related to life satisfaction?. *Applied Psychology: Health and Well-Being, 2*, 1–13. <http://dx.doi.org/10.1111/j.1758-0854.2009.01024.x>
- Pekrun, R., Elliot, A. J., & Maier, M. A. (2009). Achievement goals and achievement emotions: Testing a model of their joint relations with academic performance. *Journal of Educational Psychology, 101*, 115–135. <http://dx.doi.org/10.1037/a0013383>
- Phillips, J. M., & Gully, S. M. (1997). Role of goal orientation, ability, need for achievement, and locus of control in the self-efficacy and goal-setting process. *Journal of Applied Psychology, 82*, 792–802. <http://dx.doi.org/10.1037/0021-9010.82.5.792>
- Pintrich, P. R. (2000). An achievement goal theory perspective on issues in motivation terminology, theory, and research. *Contemporary Educational*

- Psychology*, 25, 92–104. <http://dx.doi.org/10.1006/ceps.1999.1017>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavioral Research Methods*, 40, 879–891. <http://dx.doi.org/10.3758/brm.40.3.879>
- Przepiorka, A. M. (in press). Psychological determinants of entrepreneurial success and life-satisfaction. *Current Psychology*. <http://dx.doi.org/10.1007/s12144-016-9419-1>
- 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-jclp2270380118%3E3.0.co;2-i](http://dx.doi.org/10.1002/1097-4679(198201)38:1%3C119::aid-jclp2270380118%3E3.0.co;2-i)
- Senko, C., & Harackiewicz, J. M. (2005). Achievement goals, task performance, and interest: Why perceived goal difficulty matters. *Personality and Social Psychology Bulletin*, 31, 1739–1753. <http://dx.doi.org/10.1177/0146167205281128>
- Singley, D. B., Lent, R. W., & Sheu, H. B. (2010). Longitudinal test of a social cognitive model of academic and life satisfaction. *Journal of Career Assessment*, 18, 133–146. <http://dx.doi.org/10.1177/1069072709354199>
- Smári, J., Arason, E., Hafsteinsson, H., & Ingimarsson, S. (1997). Unemployment, coping and psychological distress. *Scandinavian Journal of Psychology*, 38, 151–156. <http://dx.doi.org/10.1111/1467-9450.00021>
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, 60, 570–585. <http://dx.doi.org/10.1037/0022-3514.60.4.570>
- Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology*, 53, 80–93. <http://dx.doi.org/10.1037/0022-0167.53.1.80>
- Stoeber, J., Stoll, O., Pescheck, E., & Otto, K. (2008). Perfectionism and achievement goals in athletes: Relations with approach and avoidance orientations in mastery and performance goals. *Psychology of Sport and Exercise*, 9, 102–121. <http://dx.doi.org/10.1016/j.psychsport.2007.02.002>
- Tay, C., Ang, S., & Van Dyne, L. (2006). Personality, biographical characteristics, and job interview success: A longitudinal study of the mediating effects of interviewing self-efficacy and the moderating effects of internal locus of causality. *Journal of Applied Psychology*, 91, 446–454. <http://dx.doi.org/10.1037/0021-9010.91.2.446>
- Zhou, M. (2016). University students' emotion during online search task: A multiple achievement goal perspective. *The Journal of Psychology*, 150, 576–590. <http://dx.doi.org/10.1080/00223980.2016.1143797>



**Table 1.** Comparison of results from measurement models

Model	Description	$\chi^2$	<i>df</i>	$\Delta\chi^2$	CFI	NNFI	RMSEA
Null model	All the indicators are independent.	7781.41	114		.01	-.05	.54
Baseline model	Four factors.	348.79	98		.96	.95	.09
Model 1	Three factors: achievement goal and perception of successful agency were combined into one factor.	1078.99	101	730.20	.87	.84	.20
Model 2	Three factors: achievement goal and life satisfaction were combined into one factor.	1360.17	101	1011.38	.83	.80	.23
Model 3	Three factors: achievement goal and emotion reappraisal were combined into one factor.	1453.42	101	1104.63	.82	.79	.24
Model 4	Three factors: perception of successful agency and life satisfaction were combined into one factor.	1131.96	101	783.17	.86	.84	.21
Model 5	Three factors: perception of successful agency and emotion reappraisal were combined into one factor.	1434.94	101	1086.15	.82	.79	.24
Model 6	Three factors: emotion reappraisal and life satisfaction were combined into one factor.	1409.60	101	1060.81	.82	.79	.24

Notes.  $N = 225$ .

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

\*\*  $p < .01$ .

**Table 2.** Descriptive statistics, coefficient alphas, and zero-order correlations between variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Achievement goal	5.08	1.42	(.90)									
2. Emotion reappraisal	4.27	1.67	.35**	(.95)								
3. Perception of successful	5.38	1.38	.83**	.27**	(.95)							
4. Life satisfaction	4.55	1.42	.42**	.36**	.44**	(.93)						
5. Gender			-.17*	-.04	-.07	-.02						
6. Age	2.25	.50	.03	-.10	.01	.01	.16*					
7. Income	2.76	1.14	.12	-.05	.15*	.10	-.12	.30**				
8. Education	3.44	.76	-.05	-.06	.01	-.05	-.05	.12	.24**			
9. Job tenure	2.70	.97	-.05	-.02	.01	.10	.02	.06	-.02	-.26*		
10. Social desirability	1.52	.31	.12	.43**	.09	.12	.02	-.05	-.07	-.18*	.05	(.77)

Notes. *N* = 225.

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

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

**Table 3.** Results for main effect and mediation from hierarchical regression

	Model 1: Perception of successful agency	Model 2: Life satisfaction	Model 3: Life satisfaction
Controls			
Gender	.08	.06	.04
Age	.05	-.04	-.03
Income	.07	.07	.06
Education	.06	.01	-.01
Job tenure	-.05	.12	.10
Social desirability	.01	.07	.07
Main effects			
Achievement goal	.85**	.42**	.20
Perception of successful agency			.25*
<i>F</i>	77.19**	7.94**	7.71**
<i>R</i> <sup>2</sup>	.71	.20	.22
Adjusted <i>R</i> <sup>2</sup>	.70	.18	.19
$\Delta R^2$			.02**
<i>df</i>	7,217	7,217	8,216

Notes. *N* = 225.

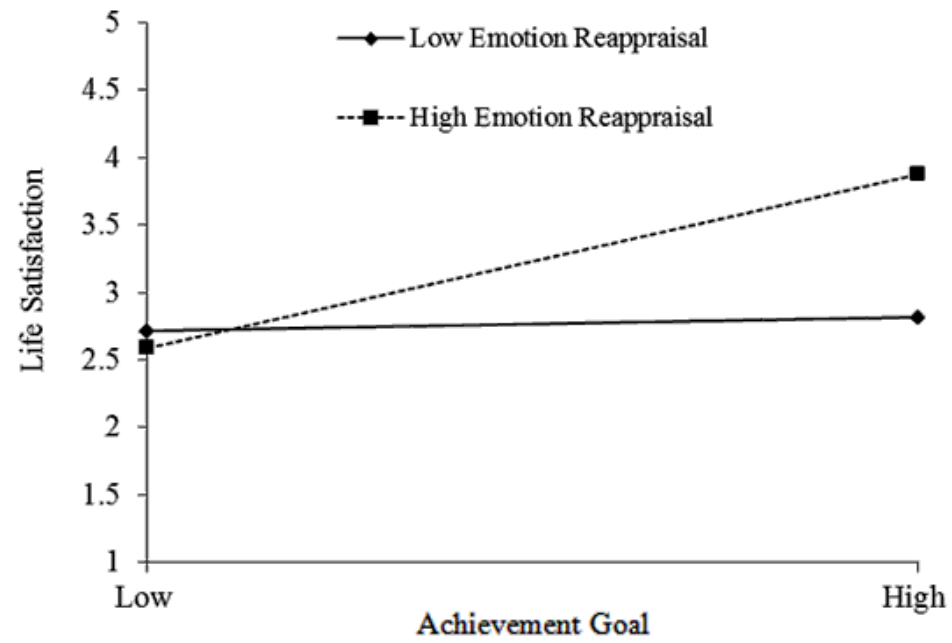
\* *p* < .05. \*\* *p* < .01.

**Table 4.** Results for moderation from hierarchical regression

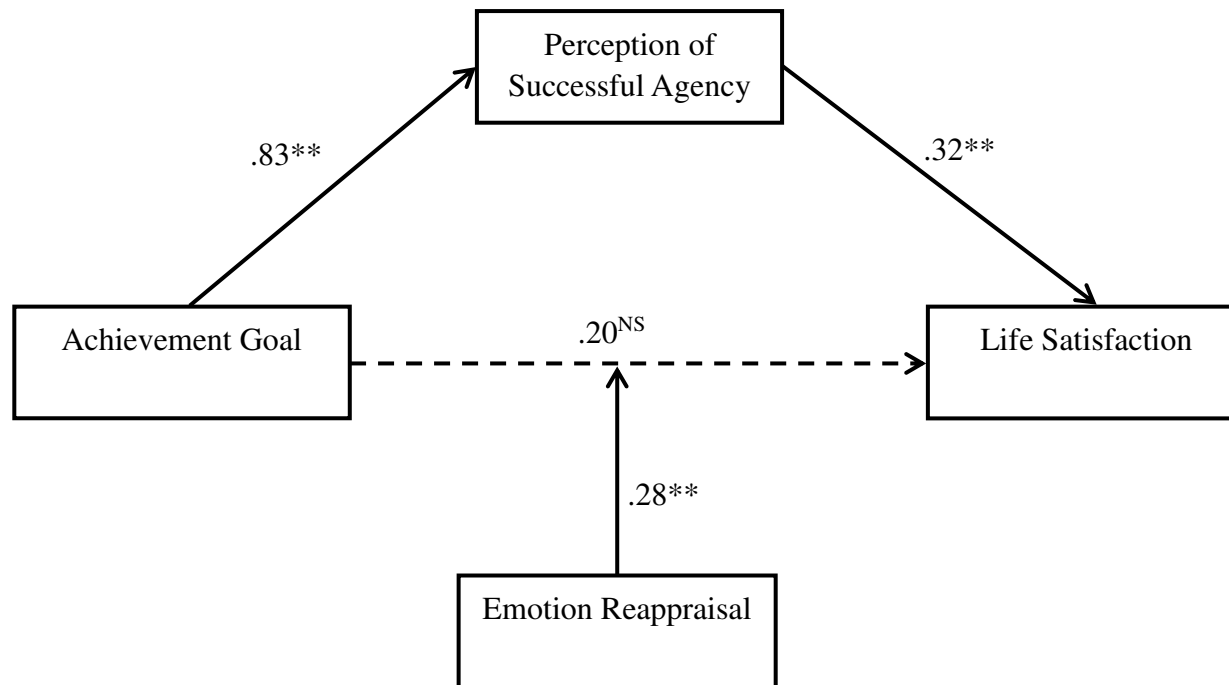
	Life satisfaction		
	Model 1	Model 2	Model 3
Controls			
Gender	.00	.06	.07
Age	-.02	-.02	-.01
Income	.13	.08	.09
Education	-.03	-.01	.01
Job tenure	.09	.12	.16*
Social desirability	.12	-.02	-.04
Main effects			
Achievement goal		.34**	.35**
Moderators			
Emotion reappraisal		.26**	.23**
Interactions			
Achievement goal × emotion reappraisal			.31**
<i>F</i>	1.56	9.07**	12.38**
<i>R</i> <sup>2</sup>	.04	.25	.34
$\Delta R^2$		.21**	.09**

Notes. *N* = 225.

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



**Figure 1.** Simple slope analyses: Moderating effect of emotion reappraisal on the relationship between achievement goal and life satisfaction.



**Figure 2.** Conceptual and statistical diagram: Research model with important coefficients.