

The relationship between happiness tendency and happiness: the multiple mediating effects of prosocial behavior and basic psychological needs

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Abstract. In order to explore the effect of meaning happiness tendency on happiness and its psychological mechanism, 665 students were tested with happiness tendency scale, basic psychological needs satisfaction Scale, prosocial behavior scale, positive-negative emotion scale and life satisfaction scale. The results show that: (1) Meaning happiness tends to affect happiness through prosocial behavior and basic psychological needs; (2) Prosocial behavior and basic psychological needs play a parallel mediating role in the relationship between meaning happiness tendency and happiness. Therefore, meaning happiness tendency can not only directly predict happiness, but also indirectly predict happiness through the parallel mediating effects of basic psychological needs satisfaction and prosocial behavior.

Keywords. Meaning happiness tendency, prosocial behavior, basic psychological needs, happiness.

1. Introduction

The British thinker Robert Owen once said that happiness is the ultimate goal of human pursuit (Owen, 1984). Happiness refers to an individual's overall evaluation of his or her quality of life, including cognitive judgment and emotional response (Diener, Suh, Lucas, & Smith, 1999). As a key indicator of mental health (Liu Xia, Zhao Jingxin, Shen Jiliang, 2013), paying attention to and studying individual subjective well-being is of great practical significance for improving national well-being and building a harmonious society (Li Yan Yan, 2015). However, the happiness index of modern people is generally low, and in the World Happiness Report released in 2018, China ranks 86th in the world, which is only at the middle level (Wang Yan, Liu Sijie, Chen Yingzhi, 2020). Therefore, how to improve happiness has become a major problem that needs to be solved.

As an important factor affecting happiness, happiness tendency refers to different ways for individuals to obtain happiness (Peterson, Park, & Seligman, 2005), including happiness tendency and meaning happiness tendency (Huta & Waterman, 2014). The happiness tendency emphasizes the pursuit of immediate pleasure to improve happiness: The meaning happiness tendency pursues the meaning of life, emphasizes personal development, and achieves happiness by exerting self-worth. According to the hedonic adaptation prevention model, the pursuit of happiness can only improve short-term mood, but not long-term happiness (Shelton & Lyubomirsky, 2012). The extended construction theory of positive emotions also holds that the meaning happiness tendency broadens people's thinking and builds lasting personal resources, while the happiness and happiness tendency only contributes to short-term mood improvement (Fredrickson, 2004). Previous studies have examined the prediction of happiness by meaning happiness tendency, but the results have been inconsistent. Studies have shown that the pursuit of meaning significantly positively predicts subjective well-being (Chan, 2013) and negatively predicts negative indicators such as depression and anxiety (Maria, Elise, & Sarah, 2018). Functional magnetic resonance imaging (fMRI) results show that individuals with activation of ventral striate, which is related to the tendency of meaningful happiness, have less depression one year later (Telzer, Fuigni, Lieberman, & Galvan, 2014). However, other studies have found that the pursuit of meaning can lead to negative experiences such as stress and anxiety (Baumeister, Vohs, Aaker, & Glibinsky, 2013). Similarly, Steger et al. (2008) also found that the pursuit of meaning significantly negatively predicted subjective well-being. Therefore, this study aims to clarify the influence of meaning happiness tendency on happiness and the specific psychological mechanism.

In the study of the influence of meaning happiness tendency on happiness, there are more theoretical speculation and related studies, but less discussion on the mediation mechanism. At present, there is little literature showing that meaningful happiness tendency affects happiness through prosocial behaviors (Yang, Li, Fu, & Kou, 2017). Prosocial behaviors are behaviors and tendencies that are consistent with social expectations and beneficial to others and the collective (Yang Ying, Kou Or, 2015). The goal theory of happiness suggests that happiness is influenced by the way individuals pursue their goals (Yang, Li, Fu, & Kou, 2017). Individuals who seek meaning are more likely to assume social responsibility and act in a prosocial manner. Meaning happiness tendency is positively correlated with prosocial behavior (Furrow, King, & White, 2004). Zhang Qingpeng et al. (2012) showed that prosocial behavior can promote interpersonal communication, and positive interpersonal relationship is an important source of happiness (Diener et al. 2010). Kahana et al. (2013) showed that prosocial behavior can significantly positively predict individual happiness. Based on this, this study proposes hypothesis 1: Meaning happiness tends to predict happiness through prosocial behavior.

In addition to the prosocial behavior as the culprit, the satisfaction of basic psychological needs is also worthy of attention. Autonomy need, ability need and relevance need are i basic human needs (Ryan & Deci, 2000). Autonomous need refers to the need to freely choose one's own behavior; competence need refers to the individual's feeling that he or she is competent for a particular activity or task; The need for connection refers to an individual's feeling of mutual love and support with significant others. The meaning happiness view of self-determination theory holds that the pursuit of

meaning promotes the satisfaction of basic psychological needs: People with a meaning happiness orientation emphasize personal growth and development, and thus may experience greater capacity to help others autonomously and feel connected to others (Ryan, Huta, & Deci, 2008). An important source of individual happiness is the satisfaction of basic psychological needs (Ryan & Deci, 2000). Diener (2012) also pointed out that the satisfaction of basic psychological needs is a stable predictor of happiness. Based on this, this study infers hypothesis 2: Meaning happiness tendency predicts happiness by satisfying basic psychological needs.

To sum up, previous studies have laid a foundation for clarifying the relationship between meaning happiness tendency and happiness, but its psychological mechanism needs to be further explored. Meaning happiness tendency and self-determination theory are influenced by social and cultural differences (Liu Jingdong, Zhong Boguang, and Luo Gangyan, 2013), and most of the existing research results are based on Western subjects. Moreover, the relationship between meaningful happiness tendency and happiness is diverging. Therefore, it is necessary to explore the psychological mechanism of meaning happiness tendency affecting happiness under Chinese cultural background.

2. Methods

2.1. Research object

Students and postgraduates from a university in Shandong Province were selected. 700 questionnaires were distributed in each class, and 665 valid questionnaires were received. The effective rate is 95%. Among them, there are 252 male students and 413 female students: 98 freshmen, 144 sophomores, 94 juniors, 210 seniors, 119 graduate students: 358 rural students, 307 urban students.

2.2. Research Tools

2.2.1. Happiness Tendency Scale

The happiness tendency Scale revised by Shi Xiafei et al. (2015) was adopted, including the happiness tendency and the meaning happiness tendency subscale. The meaning happiness tendency subscale was selected to measure the level of meaning happiness tendency. The Meaning Happiness Tendency subscale has 6 items and uses 5 points to score. A higher score indicates a higher level of meaningful happiness propensity. The Cronbach's α scores of the hedonic and meaning hedonic subscales in this study were 0.68 and 0.76.

2.2.2. Basic psychological needs Satisfaction Scale

The basic psychological needs satisfaction scale revised by Yu Chengfu et al. (2012) was adopted, including three dimensions of autonomy needs, ability needs and relevance needs, with a total of 21 items and a score of 7 points. A higher score indicates a higher degree of satisfaction of basic psychological needs. Cronbach's α of the scale in this study was 0.84.

2.2.3. Adolescent prosocial tendency Scale

The prosocial behavior scale revised by Kou et al. (2007) was adopted, including six dimensions of openness, anonymity, altruism, obedience, emotion and urgency, and a total of 26 questions were scored with 5 points. The higher the score, the more obvious the tendency of prosocial behavior. Cronbach's α of the scale in this study was 0.92.

2.2.4. Measurement of subjective well-being

With reference to previous studies (Jiang, Song, Ke, Wang, & Liu, 2016), subjective well-being was assessed using the life satisfaction scale and the positive-negative affective scale. First, the scores for all variables were standardized, and then happiness levels were calculated based on positive emotion + life satisfaction and negative emotion. The life satisfaction scale revised by Xiong Chengqing (2009) was adopted, with a total of 5 items and a score of 7 points. The higher the score, the higher the life satisfaction. Cronbach's α of the scale in this study was only 0.83. The Positive to negative emotion Scale (Chen Wenfeng, Zhang Jianxin, 2004) consists of 14 items, including positive and negative items, and adopts a 4-point score. The higher the score, the stronger the corresponding emotional feeling. Cronbach's α score of positive-negative emotion scale in this study was 0.86 and 0.83.

2.3. Data processing and common method deviation test

SPSS 17.0 statistical software was used for preliminary analysis of the data, and Mplus 7.0 was used for structural equation model test.

Harman single factor test results show that the eigenvalue of the 19 factors obtained without rotation is greater than 1, and the first factor can only explain 16.38% of the variation, which is far less than 40% of the judgment standard, indicating that there is no common method bias problem in the data.

3. Results

3.1. Descriptive statistics of each variable and related analysis results

Meaning The mean and standard deviation of happiness tendency, prosocial behavior, basic psychological needs and happiness scores and the correlation coefficients are as follows (see Table 1). The results showed that meaningful happiness tendency, prosocial behavior and basic psychological needs were positively correlated with happiness.

Table 1. Descriptive statistics and correlation analysis of each variable

	M	SD	1	2	3
Meaningful happiness tendency	22.89	3.56			
Prosocial behavior	95.77	13.23	0.35**		
Basic psychological needs	96.07	14.44	0.41**	0.32**	
Happiness Index	28.00	11.51	0.23**	0.61**	0.24**

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

3.2. Parallel mediation model testing

According to the research hypothesis, a parallel mediation model was constructed with meaning happiness tendency as independent variable, prosocial behavior and basic psychological needs as mediating variables, happiness as dependent variable, and gender, age and place of origin as controlling variables. Maximum likelihood estimation method is used to estimate the parameters of the structural equation model. The fitting index is $\frac{\chi^2}{df} = 2.24$, $RMSEA = 0.05$, $TLI = 0.96$, $CFI = 0.97$, $SRMR = 0.04$, the model fits well (Figure 1).

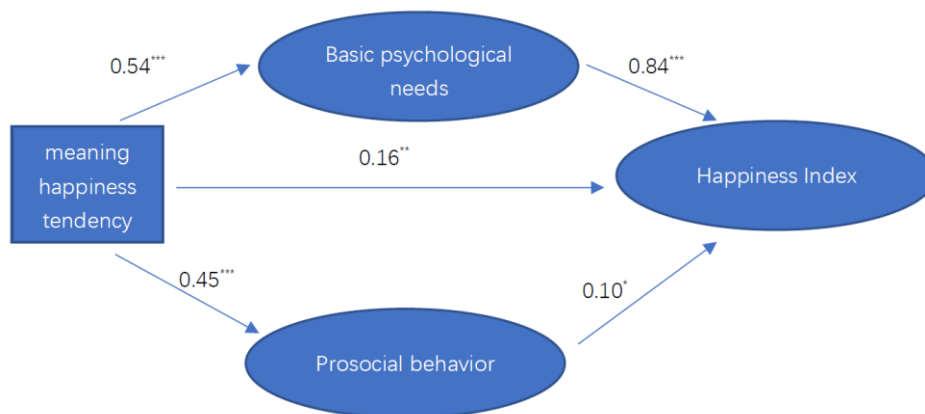


Figure 1. Model of meaning happiness tendency, basic psychological needs, happiness index and prosocial behavior

In order to better compare the influence of meaning happiness tendency on happiness with that of happiness tendency on happiness, a model of happiness tendency was further developed (Figure 2). All of the path coefficients have been retained in Figure 2 for clearer comparison with Figure 1, where the solid lines represent significant path coefficients and the dashed lines represent non-significant path coefficients. By comparing FIG. 1 and FIG. 2, it can be found that the meaning happiness tendency has a significant direct predictive effect on happiness, but the happy happiness tendency has no significant predictive effect on happiness: The meaning happiness tendency has a significant predictive effect on basic psychological needs, but the happy happiness tendency has no significant predictive effect on basic psychological needs.

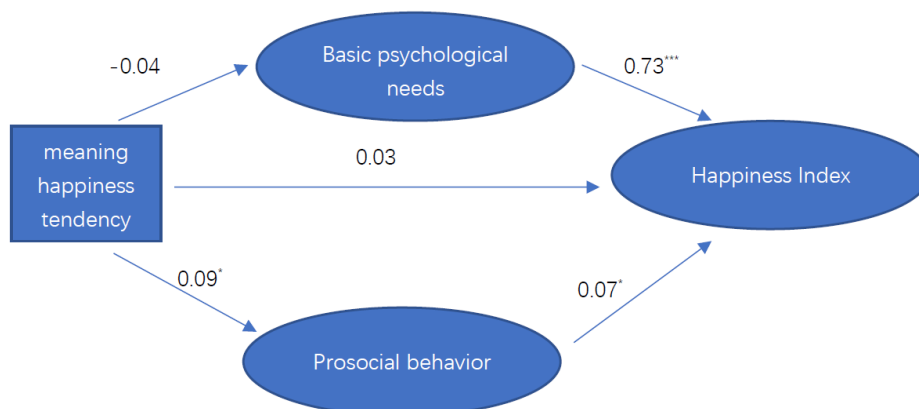


Figure 2. Model of happy happiness tendency, basic psychological needs, happiness index and prosocial behavior

The deviation-corrected percentile Bootstrap method was used to examine the mediating effect of prosocial behavior and basic psychological needs. The results showed that the bootstrap-95% confidence interval of the total mediating effect from meaning happiness tendency to happiness did not include 0, indicating that the parallel mediating effect was significant. In the meantime, prosocial behavior does not contain 0 in the confidence region between meaningful happiness tendency and happiness, so the mediating effect is significant, with an effect size of 0.04 and an effect size of 6%; basic psychological needs satisfaction does not contain 0 in the confidence region between meaningful happiness tendency and happiness question, indicating a significant mediating effect, with an effect size of 0.45 and an effect size of 69%. The total effect of happiness propensity on happiness is 0.65, and after the introduction of prosocial behavior and the satisfaction of basic psychological needs, the standardized path coefficient becomes 0.16.

4. Discussion

This study examined the mechanism of the effect of meaning happiness tendency on happiness, and deepened the understanding and recognition of the relationship between them. First, the study reveals that meaningful happiness tends to positively predict happiness. However, the direct prediction of happiness tendency was not significant. Secondly, on the basis of existing studies, two mediator variables, prosocial behavior and basic psychological need satisfaction, are introduced to enrich the ways of meaning happiness tendency to happiness. The findings have important implications for how to improve individual happiness.

As for the prediction of meaning happiness tendency on happiness, this study is consistent with previous research results (Chan, 2013; Maria, Elise, & Sarah, 2018; Telzer, Fuligni, Lieberman, & Galvan, 2014), meaning happiness tends to positively predict happiness, which is inconsistent with the findings of Steger et al. (2008). This may be because in Steger et al.'s study, the influence of the pursuit of meaning on happiness was inhibited by other variables and showed a discount effect, and the direction and intensity of the pursuit of meaning depended on variables such as meaning experience (Zhu Haiteng, Yao Xiaoxue, 2015). The process of constantly pursuing a purposeful life reflects the process of individuals striving for their ideals, and the sense of fulfillment and meaning obtained in this process contributes to the improvement of individual happiness level. The research results support the hedonic adaptation prevention model and the extended construction theory of positive emotions. In contrast, the direct predictive effect of happiness tendency on happiness is not significant, nor is the predictive effect on basic psychological needs, that is, happiness cannot be improved through the satisfaction of basic psychological needs. This confirms that the meaning happiness tendency is a more effective predictor of happiness than the happy happiness tendency (Henderson & Knight, 2012). The happiness and happiness tendency emphasizes immediate gratification to improve one's short-term mood, while the meaning happiness tendency emphasizes exerting self-worth and making meaningful connections with others to improve happiness in the long run. For college students in early adulthood, the pursuit of pleasure and the pursuit of meaning coexist with each other. However, according to the results of this study, the prediction effects of the hedonic-seeking tendency and the meaning-seeking tendency on happiness are different. Therefore, young people should be guided to pursue autonomy, excellence, personal growth and self-realization. Guide them to pursue the meaning of life and achieve happiness by exerting self-worth (Huta, Waterman, 2014).

Structural equation model will display. Meaning happiness tendency not only directly predicts happiness, but also indirectly predicts happiness through prosocial behavior and basic psychological needs satisfaction. Firstly, prosocial behavior has a partial mediating effect between meaning happiness tendency and happiness. People who are inclined to happiness have the characteristics of actively taking social responsibilities and paying more attention to the interests of others (Vella-Brodrick, The Park, & Peterson, 2009) and are therefore more likely to engage in prosocial behaviors. In addition, prosocial behavior can help individuals improve their sense of self-worth (Grant & Gino, 2010), enhance self-identity, and develop social skills (Caprara et al., 2004), which in turn is associated with higher happiness (Tian, Du, & Huebner, 2014). Secondly, the satisfaction of basic psychological needs has a partial mediating effect between meaning happiness tendency and happiness, which verifies the applicability of self-determination theory in college students in Chinese cultural background. The pursuit of meaning can better promote the satisfaction of basic psychological needs. Those who are inclined to meaning happiness have the dominant internal motivation, more experience that their behavior is determined by themselves, have closer relationship with others, have a higher sense of competence, and thus have a higher level of happiness.

There are still some shortcomings in this study. In terms of research methods, this study is a cross-sectional study and it is difficult to make causal inference. Therefore, methods such as cross lag or experimental design can be used in the future to further verify the validity of meaningful happiness tendency on happiness prediction. In addition, the samples in this study were only from undergraduates and postgraduates of Shandong University, and the source was relatively single. The exploration results on the complex relationship between meaningful happiness tendency and prosocial behavior, basic psychological needs and happiness cannot be directly deduced to other age groups and situations. Future research may focus on the mechanism of the effect of meaningful happiness tendency on happiness of children, adolescents and the elderly in different regions, so as to further promote the in-depth and perfect research on happiness tendency.

5. Conclusions

(1) Meaning happiness tendency affects happiness. The higher the meaning happiness tendency is, the higher the happiness is.

(2) Prosocial behavior and basic psychological needs have a partial mediating effect between meaning happiness tendency and happiness, and this effect is a parallel mediating effect.

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