

Research Article

Irrational Happiness Beliefs and Subjective Well-being of Undergraduate Students: A Longitudinal Study

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Abstract

Identifying factors that influence well-being are fruitful for improving the knowledge held about the correlates and predictors of well-being in both practice and theory. This research for the first time aimed to investigate whether irrational happiness beliefs, a newly presented construct, contribute to the affective components of subjective well-being over time. The sample included 103 undergraduate students (88 females and 15 males) whose ages varied from 18 to 29 years ($M = 19.39 \pm 1.62$). Participants completed measures of irrational happiness beliefs, positive affect, and negative affect both at Time 1 and Time 2 over three months apart. The findings showed that irrational happiness beliefs were significantly negatively related to positive affect only at Time 1. However, the research failed to provide evidence regarding the value of irrational happiness beliefs in predicting positive and negative affect over time. The results suggest that the impact of irrational happiness beliefs upon well-being may occur momentarily not over time. Implications and limitations of the findings are discussed and directions for future studies are provided.

Keywords: Irrational happiness beliefs, positive affect, negative affect, subjective well-being, rational emotive behaviour therapy

The construct of subjective well-being is a prominent concept in the field positive psychology, with many empirical and theoretical research having been carried out to determine the correlates, predictors, and causes of subjective well-being (e.g., Lyubomirsky, Sheldon & Schkade, 2005). Subjective well-being refers to what people think and how they perceive their lives when they make affective and cognitive evaluations about their existence (Seligman & Csikszentmihalyi, 2000). This is based on short-term life engagement in response to attainment and experience of positive emotions (e.g., happiness, pleasure, vitality) as well as avoidance of pain, suffering, and negative emotions such as sadness and stress (Ryan & Deci, 2001).

There are two important approaches of well-being; eudaimonic well-being where the focus is to determine

genuine human potential, meaning in life and engagement with life challenges and hedonic well-being where the focus is to experience pleasure and avoid pain (Ryan & Deci, 2001; Ryff & Keyes, 1995). Subjective well-being builds upon the hedonic school of well-being. In resting on the hedonic school of well-being, Diener (1984) introduced a conceptualization of subjective well-being by taking both affect and satisfaction with life into account. In his conceptualization, subjective well-being is defined as a multifaceted construct that comprises at least three components; absence of negative emotions, presence of positive emotions, and satisfaction with life (Deci & Ryan, 2008; Diener, 1984; Diener, Suh, Lucas & Smith, 1999; Diener, Napa Scollon & Lucas, 2003). Comparison of the relative frequency of experiencing

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positive affect versus negative affect reflects affect balance as these are mainly influenced by daily life events such as facing traffic congestion and eating tasty food, while satisfaction with life relatively reflects to a longer-term cognitive evaluation of a person's own life (Yang & Srinivasan, 2016). These components are experimentally and theoretically different yet overlap with one another to some extent (Ryan & Deci, 2001). Individuals with high levels of subjective well-being report greater satisfaction with life, experience more positive feelings and less negative feelings.

Research has showed that a vast range of factors is related with subjective well-being. Notably, personality traits were found to be significantly associated with subjective well-being, with adaptive personality traits such as agreeableness and extraversion being positively associated with satisfaction with life and positive affect and negatively associated with negative affect. Conversely, maladaptive personality traits such as neuroticism are negatively linked to positive affect and satisfaction with life, and positively linked to negative affect (Diener et al., 1999; Lyubomirsky et al., 2005). Demographic factors (Diener et al., 1999), socio-economic variables (Zhou et al., 2015) and physical health (Tovar-Murray, 2010) are other potential factors that affect subjective well-being of people. In addition, as dysfunctional variables, fear of happiness (Joshanloo, 2013) and valuing happiness (Mauss et al., 2011) have been shown to be negatively related to subjective well-being. Moreover, positive psychological construct including hope, optimism, psychological adjustment, meaning in life (Arslan & Coşkun, 2020; Arslan, Yıldırım & Majercakova Albertova, 2021; Genç & Arslan, 2021; Yıldırım, 2020) have been shown to influence subjective well-being. The present research investigated whether having irrational happiness beliefs affects individuals' subjective well-being over time.

Yıldırım and Maltby (2021) recently introduced the concept of irrational happiness beliefs into the extant literature. Theoretical foundation of the concept is derived from the Rational Emotive Behavioural Theory (REBT; Ellis, 1955, 1957, 1962, 1973, 1985, 1994) which suggests that irrational and rational beliefs have potential to affect future psychological events. According to the theory, people tend to overly disturb themselves with absolutistic beliefs, but they are able to replace such thinking/beliefs with preferences which are generally healthy and productive rather than

irrational statements that include “should”, “must” and “ought to” which are generally destructive and unhealthy.

Irrational happiness beliefs build upon the REBT and directly refer to the conditional aspect of happiness, it therefore addresses an important gap in the literature in terms of presenting happiness from an absolutistic perspective. Irrational happiness beliefs can be viewed to be potentially dysfunctional, maladaptive, unhealthy resting on the conditional aspect of happiness where people place unreasonable happiness standards on themselves to achieve happiness. The central notion of irrational happiness beliefs is related to the idea that placing happiness to an absolute level by holding specific concepts such as “should”, “must” and “ought to” as part of individuals' thinking can be destructive for one's well-being and mental health. Irrational happiness beliefs are mostly acceptable beliefs that are expressed or held by people yet, due to their unattainable nature, they are un-achievable. Irrational happiness beliefs build on a conditional aspect of happiness that happiness should, ought and must be achieved. Happiness beliefs, as rest on should, ought and must attainment, have potential to cause disturbance among people when these things do not always occur. Therefore, irrational statements such as “I should always be happy in all aspects of my life” are possible irrational happiness beliefs that may result in emotional and psychosocial disturbance (Yıldırım & Maltby, 2021). There may be some characteristics of people who have irrational happiness beliefs. Firstly, individuals with irrational happiness beliefs may make conditional irrational happiness standards that seem hard to reach. As such, failure to attain those standards may result in psychological disturbance as it is not always possible for individuals find out pathways to happiness in their lives. Secondly, individuals with irrational happiness beliefs are inclined to seek for pleasure via which to magnify their happiness and distance themselves from pain to order to avoid negative consequences of events. Thirdly, individuals with irrational happiness beliefs may mostly concentrate on their happiness rather than contributing to well-being and happiness of others. Fourthly, individuals with irrational happiness beliefs can be viewed as having rigid and inflexible happiness-related beliefs and thoughts.

There is a scarcity of evidence about the association between irrational happiness beliefs, and

well-being outcomes. This is because, the construct has been recently presented into the relevant literature. In the original study conducted by Yıldırım and Maltby (2021), a high level of irrational happiness beliefs was found to be significantly negatively related to subjective happiness, satisfaction with life, positive affect, psychological well-being, and rationality whereas it was significantly positively related to negative affect, perceived stress, valuing happiness, and irrationality. This suggests the importance of irrational happiness beliefs for well-being outcomes.

Given the significance of subjective well-being in human functioning, it will be fruitful to expand the factors that longitudinally influence individuals' subjective well-being. Although limited, a negative relationship between irrational happiness beliefs, and subjective well-being is reported (Yıldırım & Maltby, 2021). However, it is still not known whether irrational happiness beliefs can longitudinally contribute to subjective well-being. As such, it would be useful to examine how irrational happiness beliefs are longitudinally related to subjective well-being. Investigating the longitudinal effect of irrational happiness beliefs on subjective well-being would improve our understanding of irrational happiness beliefs and their possible outcomes on well-being, therefore allowing the development of effective interventions through which to promote well-being. Therefore, the current study aimed to examine whether irrational happiness beliefs would predict affective components of subjective well-being (namely positive affect and negative affect) over time. In particular, we investigated the predictive role of the irrational happiness beliefs in subjective well-being at a second time point after controlling for corresponding positive affect and negative affect at a first time point. To that end, we expected that irrational happiness beliefs would correlate with positive affect and negative affect both at Time 1 and Time 2. We also expected that irrational happiness beliefs would predict lower positive affect and higher negative affect over time.

Method

Participants

One hundred fifty-seven native British-speaking students were invited to participate in the study. Only 103 participants volunteered to take part in the study at two time points. In the sample, there were 88 females and 15 males. They ranged in age between 18 and 29 years old ($M = 19.39$ years, $SD = 1.62$). Three participants did not provide information about their age.

This was a convenience sample including students enrolled in psychology programs at the University of Leicester, United Kingdom.

Measures

Irrational Happiness Beliefs Scale (IHBS, Yıldırım & Maltby, 2021). The IHBS refers to dysfunctional aspect of happiness and was developed to assess happiness as an absolute by using specific words of “should,” “must,” and “ought to.” The scale includes three items answered on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree. A sample item is “I should always be happy in all aspects of my life.” An overall score can be computed by summing the responses of all items. Higher scores on the IHBS signify a higher level of irrational happiness beliefs. In this study, Cronbach alpha coefficients for the scale at Time 1 and Time 2 were same ($\alpha = .89$).

Positive and Negative Affect Scales (PANAS: Watson, Clark & Tellegen, 1988). The PANAS includes 20 items that assesses the two affective components of subjective well-being: positive affect (PA) and negative affect (NA). Each item on the subscales is answered on a 5-Likert-type scale varying from 1=very slightly or not at all to 5 = extremely for the past month. Sample items are “enthusiastic,” “attentive,” “distress” and “nervous.” The subscale scores are computed by summing of the items on the respective subscale. Higher scores on the PA show a higher level of experiencing positive affect whereas higher scores on the NA show a higher level of experiencing negative affect. In this study, Cronbach alpha coefficients for PA and NA ranged between .64 and .82.

Procedure

Participants completed online survey including the IHBS and PANAS. A secure link was generated and sent to participants via SONA system in the University of Leicester experiment participation scheme wherewith participants could participate in the survey in return for obtaining course credits. Participants were required to click the link which directed them to the online consent page. Only participants who gave their consent were allowed to continue to participate in the study. Participants were fully assured about the anonymity and confidentiality their responses. Administrations of the questionnaires were the same at two time points. Institutional Ethic Board of the University of Leicester reviewed and approved the ethic for this study.

Table 1. Descriptive statistics and correlations among the study variables

Variable	Descriptive statistics					Correlations					
	Mean	SD	Skew.	Kurt.	α	1.	2.	3.	4.	5.	6.
<i>Time 1</i>											
1. Irrational happiness beliefs	11.93	4.42	-0.12	-0.67	.89	1					
2. Positive affect	33.89	6.40	0.20	-0.52	.80	-.24*	1				
3. Negative affect	20.11	4.92	0.34	-0.43	.64	.14	-.64**	1			
<i>Time 2</i>											
4. Irrational happiness beliefs	12.23	4.70	-0.16	-0.76	.89	.72**	-.16	.14	1		
5. Positive affect	35.23	6.53	0.06	-0.56	.82	-.12	.57**	-.48**	-.14	1	
6. Negative affect	18.36	5.19	0.59	-0.39	.76	.15	-.37**	.64**	.16	-.69**	1

* $p < 0.05$; ** $p < 0.01$

Data Analysis

Before analysing of the main findings of this study, preliminary analysis was conducted to explore whether there were any missing responses. No missing responses were found in the dataset. The Z statistic was performed to determine any univariate outliers, with none being reported since all Z scores were within the acceptable bounds ± 3.29 . Multicollinearity analysis was conducted utilising linear regression analysis. Using variance inflation factor (VIF) and its cut-off values of at least 5 and tolerance statistics of less than .2 that represent the presence multicollinearity (Kutner, Nachtsheim & Neter, 2004), no multicollinearity problem was found as the VIF and tolerance values for the independent variables were no greater than 3.04 and no smaller than .33, respectively. Pearson correlation was computed between the analysed study variable. Hierarchical regression analysis was conducted to examine the extent to which irrational happiness beliefs could predict changes in positive and negative affect over time. All the analyses were carried out using SPSS 24 for Windows.

Results

Table 1 presents mean, standard deviation, skewness, kurtosis, and correlations between the variables of this study. As presented in Table 1, the data did not contravene the univariate normality since all kurtosis and skewness values were within a “very good” range of ± 1 (George & Mallery, 2010; Tabachnick & Fidell, 2013). Correlation analysis was performed to explore the linear relationships between the study variables. As reported in Table 1, irrational happiness beliefs had a significant negative relationship with positive affect at Time 1. The relationship between irrational happiness

beliefs and negative affect at Time 1 was insignificant despite an expected pattern of the correlation between the two variables. Furthermore, irrational happiness beliefs were not significantly correlated with positive affect and negative affect at Time 2.

We conducted multiple regression analyses to investigate the predictive of the irrational happiness beliefs by considering whether it explained a significant amount of variance in positive affect and negative affect at Time 2 at three months after the first implementation of the study. To that end, we controlled for the respective negative affect and positive affect at Time 1 to minimize its influence upon the scores of the participants at Time 2. In the regression analyses, positive affect and negative affect at Time 2 were treated as outcome variables, while negative affect and positive affect at Time 1 were treated as predictor variables in Step 1. Irrational happiness beliefs at Time 1 were treated as predictor variable and added in Step 2. As the R^2 change in regression analysis is a helpful measure in investigating the unique contribution of a new predictor variable when accounting for variance in an outcome variable (Field, 2013), we took this approach to investigate the unique contribution of the irrational happiness beliefs in positive affect and negative affect.

The results of the regression analysis indicated that the positive affect at Time 1 significantly predicted the positive affect at Time 2 ($F [1, 102] = 49.12, R = .57, R^2 = .33, \text{adj } R^2 = .32, p < .001$) and that the negative affect at Time 1 significantly predicted the negative affect at Time 2 ($F [1, 102] = 70.82, R = .64, R^2 = .41, \text{adj } R^2 = .41, p < .001$).

Table 2. Regression analysis with *positive* and *negative affect* at Time 2 used as dependent variables.

Variable	B	SE	β	<i>t</i>	<i>Sig.</i>	R^2	ΔR^2
Positive affect Time 2							
<i>Step 1</i>						0.33	0.33**
Positive affect—Time 1	0.58	0.08	0.57	7.01	0.00		
<i>Step 2</i>						0.33	0.00
Positive affect—Time 1	0.59	0.09	0.58	6.82	0.00		
Irrational happiness beliefs—Time 1	0.03	0.12	0.02	0.24	0.81		
Negative affect Time 2							
<i>Step 1</i>						0.41	0.41**
Negative affect—Time 1	0.68	0.08	0.64	8.42	0.00		
<i>Step 2</i>						0.42	0.00
Negative affect—Time 1	0.67	0.08	0.63	8.20	0.00		
Irrational happiness beliefs—Time 1	0.07	0.09	0.06	0.81	0.42		

Note. ** $p < .001$, SE = standard error

Adding the irrational happiness beliefs in Step 2 did not significantly lead to changes in R^2 neither for positive affect nor for negative affect at Time 2 ($\Delta R^2 = .00$ for the positive affect and $\Delta R^2 = .00$ for the negative affect). These results suggest that the value of irrational happiness beliefs did not appear in negative affect and positive affect over time over and above the respective components of affect at Time 1 (see Table 2).

Discussion

Over the past decades, happiness research continued to develop, and with introduction of new conceptualisations of happiness that represent dysfunctional aspects of happiness including valuing happiness (Mauss et al., 2011), fear of happiness (Joshani, 2013), and irrational happiness beliefs (Yildirim & Maltby, 2021). The new avenue of happiness research, which deals with maladaptive aspects of happiness (Yildirim, Davison, Flowe & Maltby, 2021; Yıldırım & Maltby, 2021), shows that happiness is not always good at all times and in all contexts, rather it can be backfired (Mauss et al., 2011). This emerging body of research requires further investigation to have a comprehensive understanding of how happiness can be harmful for mental health and well-being outcomes.

Present study aimed to examine the value of irrational happiness beliefs in prediction of negative affect and positive affect over time. Correlational analysis results indicated a significant negative association between irrational happiness beliefs and positive affect at Time 1. Insignificant relationship was found between irrational happiness beliefs and negative affect at Time 1. Furthermore, the emerging relationships did not appear at Time 2 in spite of an expected

correlational pattern between the variables. These results suggest that those who score high on irrational happiness beliefs tend to report less positive affect, but not necessarily experience negative affect. The emerging negative correlation between irrational happiness beliefs and positive affect is in line with the theoretical assumption of irrational happiness beliefs. In the study conducted by Yıldırım and Maltby (2021) irrational happiness beliefs were found to be significantly positively related to negative affect and significantly negatively related to positive affect. These findings are only preliminary findings and therefore more research is needed to be conducted in this area. Furthermore, in earlier studies, maladaptive aspects of happiness were found to be significantly negatively associated with subjective well-being, psychological well-being, and flourishing (Yildirim & Aziz, 2017; Yıldırım et al., 2021; Yıldırım & Belen, 2019; Yıldırım & Belen, 2018).

Concerning the regression analysis, the present study did not offer empirical evidence about the effect of irrational happiness beliefs on negative affect and positive affect longitudinally. Evidence regarding the relationship between irrational happiness beliefs and subjective well-being is established using cross-sectional design (Yıldırım & Maltby, 2021). The insignificant longitudinal association between irrational happiness beliefs and negative affect and positive affect can be explained in various ways. The first explanation could be related to methodological issues, as it could have led to the occurrence of the association between irrational happiness and affective components of subjective well-being. For instance, since the relationships between irrational happiness beliefs and

positive affect was significant at Time 1, but not at Time 2, this may suggest that the chosen time interval of 3 months for the present study could be too long to show the effect of irrational happiness beliefs on the positive affect and negative affect. That is, the effect may disappear over a particular time period and therefore it is probable that the momentary effect could have been manifested when the time interval was shorter than three months. As such, it would be fruitful to investigate this effect by using a shorter time interval. It is important to examine the momentary effect of irrational happiness beliefs on emotion regulation. Therefore, future research should examine the impact of irrational happiness beliefs within a context in which momentary affects are present and manipulated. The second explanation could attribute to the complexity of the association occurred between irrational happiness beliefs and affective components of subjective well-being as the association between irrational happiness beliefs and well-being could be much more complex than simple direct longitudinal prediction. There may be other factors affecting the associations between irrational happiness beliefs and subjective well-being over time and therefore mediation and moderation approached are needed to address this point. The third explanation could relate to the nature of irrational happiness beliefs, as it may not be considered as a variable that affects subjective well-being longitudinally or a long-lasting psychological characteristic. Instead, irrational happiness beliefs may be considered as a variable that affects subjective well-being, particularly affective components, over a short time-period. Its impact upon well-being may occur momentarily, not over time. This opens up a new avenue for future studies.

The current research is not without limitations that should be taken into account when the results are interpreted. Firstly, the participants included solely undergraduate students, with this restricting the generalisability of the emerging results to other samples. The sample size of the current research was relatively small, as restricts the statistical power of finding a small effect. To address this problem, present results should be replicated on different and large samples including adults and adolescents to determine robust associations among the variables analysed in this study. Secondly, as this study was longitudinal in nature, we avoided the use of definitive statements about causal relationships between the variables. Therefore, it would be fruitful to explore the causal

relationship among the constructs examined in the current research. Future research should be carried out to obtain a better understanding of directionality among the study variables such as an experimental research to provide evidence of causality among the analysed variables. Thirdly, the data in the current study was self-reported. The use of different approaches through objective measures such as skin conductance response and heart rate may be useful in minimising the limitations about the subjectivity of the findings as self-report data being largely criticised in the relevant literature in relation to self-report measures potentially leading to self-deception and social desirability issues. Therefore, it is possible that issues with the self-report measures used in this study could have affected the responses of the participants. Finally, we have chosen a time interval of the past month for which affect was answered on the PANAS. Irrational happiness beliefs construct was not viewed for such a restricted time interval and therefore it is possible that the association among the analysed variables could have been different if the PANAS had been presented with instructions to report positive and negative affect on an overall level without a limited time interval.

Compliance with Ethical Standards

Ethical Standards

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Ethic approval has been obtained before conducting the research.

Declaration of Conflicting Interests

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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References

- Arslan, G. ., & Coşkun, M. (2020). Student subjective wellbeing, school functioning, and psychological adjustment in high school adolescents: A latent variable analysis. *Journal of Positive School Psychology*, 4(2), 153-164. <https://doi.org/10.47602/jpsp.v4i2.231>
- Arslan, G., Yıldırım, M., & Majercakova Albertova, S. (2021). Development and initial validation of the Subjective Academic Wellbeing Measure: A new tool of youth wellbeing in school. *Journal of Positive School Psychology*. <https://journalppw.com/index.php/JPPW/article/view/251>
- Genç, E., & Arslan, G. (2021). Optimism and dispositional hope to promote college students' subjective well-being in the context of the COVID-19 pandemic. *Journal of Positive School Psychology*. <https://journalppw.com/index.php/JPPW/article/view/255>
- Deci, E. L., & Ryan, R. M. (2008). Hedonia, eudaimonia, and well-being: An introduction. *Journal of Happiness Studies*, 9(1), 1–11.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542–575.
- Diener, E., Napa Scollon, C., & Lucas, R. E. (2003). The evolving concept of subjective well-being: The multifaceted nature of happiness. *Advances in Cell Aging and Gerontology*, 15, 187–219.
- Diener, E., Suh, E.M., Lucas, R.E., & Smith, H.L. (1999). Subjective well-being three decades of progress. *Psychological Bulletin*, 125(2), 276–302.
- Ellis, A. (1955). New approaches to psychotherapy techniques. *Journal of Clinical Psychology*, 11(3), 207-260.
- Ellis A. (1957). Rational psychotherapy and individual psychology. *Journal of Individual Psychology*. 13(1), 38–44.
- Ellis, A. (1962). *Reason and emotion in psychotherapy*. New York: Lyle Stuart.
- Ellis, A. (1973). *Humanistic psychotherapy*. New York: McGraw-Hill.
- Ellis, A. (1985). Expanding the ABC's of rational-emotive therapy. In M. J. Mahoney & A. Freeman (Eds.), *Cognition and Psychotherapy*. New York: Plenum.
- Ellis, A. (1994). *Reason and emotion in psychotherapy: Revised and expanded edition*. New York: Birch Lane Press.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.
- George, D., & Mallery, P. (2010). *SPSS for windows step by step: A simple guide and reference 17.0 update (10th Ed.)*. Boston: Pearson.
- Joshanloo, M. (2013). The influence of fear of happiness beliefs on responses to the satisfaction with life scale. *Personality and Individual Differences*, 54(5), 647-651.
- Kutner M. J., Nachtsheim C. J., Neter J., & Li W. (2004). *Applied Linear Statistical Models (5th ed.)*. New York: McGraw-Hill.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131(6), 803-855.
- Mauss, I. B., Tamir, M., Anderson, C. L., & Savino, N. S. (2011). Can seeking happiness make people unhappy? Paradoxical effects of valuing happiness. *Emotion*, 11(4), 807—815.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudemonic well-being. *Annual Review of Psychology*, 52(1), 141-166.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69, 719-727.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5–14.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics (6th ed)*. Boston: Pearson Education.
- Tovar-Murray, D. (2010). Social health and environmental quality of life: Their relationship to positive physical health and subjective well-being in a population of urban African Americans. *The Western Journal of Black Studies*, 34, 358-366.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070.
- Watson, D., & Hubbard, B. (1996). Adaptational style and dispositional structure: Coping in the context of the Five-Factor model. *Journal of Personality*, 64(4), 737-774.

- Yang, C., & Srinivasan, P. (2016). Life satisfaction and the pursuit of happiness on Twitter. *PLoS One*, *11*(3), e0150881.
- Yildirim, M., & Aziz, I. A. (2017). Psychometric properties of Turkish form of the Fear of Happiness Scale. *The Journal of Happiness & Well-Being*, *5*(2), 187-195.
- Yildirim, M., & Belen, H. (2019). The role of resilience in the relationships between externality of happiness and subjective well-being and flourishing: A structural equation model approach. *Journal of Positive School Psychology*, *3*(1), 62-76.
- Yildirim, M., & Belen, H. (2018). Fear of happiness predicts subjective and psychological well-being above the Behavioral Inhibition System (BIS) and Behavioral Activation System (BAS) model of personality. *Journal of Positive School Psychology*, *2*(1), 92-111.
- Yildirim, M., Davison, E., Flowe, H. D., & Maltby, J. (2021). Reconsidering Valuing Happiness: The Application of Goal Type Theory. *International Journal of Mental Health and Addiction*, 1-11. <https://doi.org/10.1007/s11469-020-00478-8>
- Yildirim, M., & Maltby, J. (2021). Irrational Happiness Beliefs Scale: Development and initial validation. *International Journal of Mental Health and Addiction*. <https://doi.org/10.1007/s11469-021-00513-2>
- Zhou, Y., Zhou, L., Fu, C., Wang, Y., Liu, Q., Wu, H.... Zheng, L. (2015). Socio-economic factors related with the subjective well-being of the rural elderly people living independently in china. *International Journal for Equity in Health*, *14*(5), 1-9. <https://doi.org/10.1186/s12939-015-0136>.