Summary

Psychological Well-Being; Time Perspective and Psychological Flexibility

Lütfiye Nur Akkoç Arabacı
Istanbul Medipol University

Gizem Cesur Soysal
Istanbul Medipol University

Time perspective is defined as dividing human experience into three temporal categories as past, present and future (Zimbardo, Keough & Boyd, 1997). According to Zimbardo and Boyd (2018), the time perspective is created via judgments learned through experiences, culture, education, social class, religion, climate and other conditions. The routine time perspective becomes a habit and shows continuity. Thus, the person often prefers one of the time perspectives to the other without being aware of it. The preferred time perspective plays an important role in one’s emotions, thoughts and behaviors (Zimbardo & Boyd, 2018). Zimbardo and Boyd (1999) developed a valid and reliable scale of time perspective namely the Zimbardo Time Perspective Inventory (ZTPI). ZTPI consists of five sub-dimensions; positive-past, negative-past, present-hedonistic, present-fatalistic, and future. Positive-Past represents an emotional, nostalgic and pleasant attitude to the past. This dimension also emphasizes maintaining relationships with family and friends. Negative-Past dimension evaluates the past as negative and disturbing. While traumatic and negative events may cause this assessment, only the person’s perspective or the interaction of the two conditions can reveal this orientation. Present-Hedonistic represents focusing on present pleasure and not dealing with future outcomes. Present-Fatalistic is the attitude that the future cannot be predicted and intervened. Future perspective considers goals and success. Those who own future perspective behave as planned as possible in the present moment. Research have shown that time perspective predicts depression, anger, anxiety, self-esteem and educational achievement (Zimbardo & Boyd, 1999), social relationships (Holman & Zimbardo, 2009), mood (Stolarski, Matthews, Postek, Zimbardo & Bitner, 2014) and subjective well-being (Drake, Duncan, Sutherland, Abernethy & Henry, 2008).

Flexible and optimal use of the time perspective is shaped based on values and needs (Bonniwell & Zimbardo, 2015). This concept is named as the balanced time perspective (BTP). BTP defined as the mental ability to switch effectively among time perspectives depending on the requirements of the situation and personal resources (Zimbardo & Boyd, 1999). BTP plays a role on people’s well-being (Bonniwell & Zimbardo, 2015).

Psychological well-being can be defined based on the distinction between positive and negative emotions and life satisfaction (Andrews, 1974; Bryant & Veroff, 1982; Stock, Okun & Benin, 1986). Psychological well-being is related to emotions and life satisfaction (Ryff, 1989). Research has shown that psychological well-being is associated with more stable marriages (Kim & McKenry, 2002), higher income (Kaplan, Shema & Leite, 2008), more creative ideas (Ghorbani & Kazemi-zahrani, 2015) and stronger immune system (Lyubomirsky, King & Diener, 2005). Moreover there is a strong positive relationship between psychological well-being and the balanced time perspective (Jankowski, Zajenkowski & Stolarski, 2020; McKay et al., 2019; Webster & Ma, 2013). In order to reach BTP one’s require flexible transitions between time perspectives. Therefore, psychological flexibility might have a mediating role between BTP and psychological well-being.

Psychological flexibility/inflexibility is considered on the basis of Acceptance and Commitment Therapy (ACT) in the current study (Hayes, Strosahl & Wilson, 1999). Accordingly, psychological flexibility can be defined as being in contact with the present moment, being aware of the feelings, accept all sensations and thoughts, even if they are unpleasant. Psychological flexibility also includes acting in line with personal values (Ramacci, Bellini, Presti & Santisi, 2019). Studies have shown that ACT applications has shown increased flexibility and improved psychological well-being (Hayes, Luoma, Bond, Masuda & Lillis, 2006). A meta-analysis study also indicates that ACT is effective in the treatment of various clinical disorders such as anxiety, depression and...

In the light of these, the present study aims to investigate the role of psychological flexibility on the relationship between time perspective and psychological well-being.

**Method**

**Participants**

The sample consisted of 350 people who are 18 years of age and over. The average age was 29.53 (SD = 6.96) years.

**Measurements**

**Demographic Information Form.** This form was designated by the researchers to collect social-demographic information about the participants.

**Zimbardo Time Perspective Inventory (ZTPI).** ZTPI was used to evaluate participants’ time perspectives. The questionnaire is developed by Zimbardo and Boyd (1999) consists of 56 questions and five sub-dimensions. The Turkish validity and reliability study of the scale was conducted by Akırmak (2019) and it was found that the Cronbach’s alpha for the sub-dimensions was between .68 and .84. In the current study, Cronbach alpha was between .87 and .71.

**Flourishing Scale.** Flourishing Scale is developed by Diener and colleagues (2009) which includes themes such as meaningful life, positive relationships, adequate self-perception, and having a goal. Adapted to Turkish culture by Telef (2013) and Cronbach alpha was found as .80. In the current study, Cronbach alpha was .85.

**Acceptance and Action Questionnaire-II (AAQ-II).** was developed by Hayes et al. (2004) to measure psychological inflexibility. Turkish adaptation was conducted by Yavuz et al. (2016) and Cronbach alpha was found as .84. In the current study, Cronbach’s alpha was .92.

**Procedure**

Ethical approval for this study was obtained from Istanbul Medipol University. Written informed consent was obtained from all subjects before the research. Data was collected from 350 participants using an online survey with a random sampling method.

**Results**

**Correlation Analysis**

The result of correlation analysis indicated that there was a significant positive correlation past positive 

\( r = .39, p < .01 \)

and future 

\( r = .35, p < .01 \)

with psychological well-being. Increase in the psychological well-being was related with decrease in the past negative 

\( r = -.49, p < .01 \)

and deviation from the balanced time perspective 

\( r = -.61, p < .01 \).

Moreover, a significant negative correlation among psychological well-being 

\( r = -.52, p < .01 \)

and psychological inflexibility were also noted.

**Regression Analysis**

A two-step hierarchical regression analysis was conduct to assess the predictors of psychological well-being. In the first step, all time perspectives were significant predictors of psychological well-being. This model explains the 48% of total variance 

\( R^2 = .48, F(5, 344) = 62.40, p < .01 \).

In second step AAQ-II were entered to the equation. The results showed that AAQ-II was a significant predictor of psychological well-being. Besides, all time perspectives were still significant predictors in the final model. The last model’s explained variance was .49 

\( R^2 = .49, F(6, 343) = 55.64, p < .01 \).

**Mediation Analysis**

Mediation analyses were conducted using the PROCESS macro to assess indirectly effect of the psychological inflexibility level. The results show that the indirect effect of deviations from a balanced time perspective on psychological well-being through psychological inflexibility was significant 

\( B = -.17, SE = .06, \%95 GA [-.3037, -.0565], p < .001 \).

**Discussion**

Current study aimed to investigate the mediator role of psychological flexibility on the relationship between time perspective and psychological well-being. Second, this study examined the predictor role of the time perspective on psychological well-being. Accordingly the regression analysis results revealed that five profiles of time perspective predicted significantly psychological well-being. Considering past positively, benefiting from the pleasures of the present and acting with the responsibility for the future increases the psychological well-being. However, all negative schemes against the past and fate-oriented judgments decrease psychological well-being.

The mediator analysis result indicated that psychological flexibility plays a mediator role in the relationship between balanced time perspective (BTP) and psychological well-being. Accordingly, BTP affects psychological flexibility positively and psychological flexibility also increases well-being positively. Zimbardo and Boyd (2018) consider that a flexible transition between
time perspectives is essential to maximize psychological well-being and psychological health. In a BTP, flexible transitions should be within the context of the situation, rather than completely neglecting a time perspective or using one (Zimbardo & Boyd, 1999). This kind of flexibility will contribute to increasing psychological well-being by increasing the level of psychological flexibility, as this study indicated.

Psychological flexibility consists of being fully aware of experiences (emotions, sensations, and thoughts), welcoming them with openness and acceptance; including the undesired ones, being in contact with the present moment and expressing value-oriented behaviors (Harris, 2018). Therefore, low Past-Negative and Present-Fatalism in BTP can be interpreted as a positive effect on being aware of experiences and welcoming with openness and acceptance. Medium-high score of Present-Hedonistic in BTP can affect the contact with the present moment. High Past-Positive and Future in BTP, might have a positive effect value-oriented behaviours. Also, many studies showed that interventions involving psychological flexibility are effective to increase psychological well-being (Deledda et al., 2015; Marshall & Brockman, 2016; Wersebe et al., 2018). Besides, researchers have emphasized the way of thinking rather than the content of thoughts in the time perspective theory and interventions (Zimbardo, Sword & Sword, 2012). Similarly, “being fully aware of experiences welcoming them with openness and acceptance” is to accept thoughts as they are and without allowing to assess the content of the thoughts (Harris, 2018) as in the case of psychological flexibility. On this basis, it can be interpreted that working on time perspective suggest working on the way of thinking rather than the content of thoughts. Thus, time perspective affects psychological flexibility positively. According to these conclusions, the psychological flexibility can be increased by interventions to achieve a balanced time perspective in turn the psychological well-being will be also increased.

Consequently, this study examined the mediator role of psychological flexibility on the relationship between time perspective and psychological well-being. While in the literature there are many studies on balanced time perspective and psychological well-being, there is no study on the role of psychological flexibility in this relationship. The results are consistent with the time perspective theory and they are useful for clinical practice.