The Relationship between Subjective Distance to Death and Emotional and Cognitive Complexity:

An Integrative Model

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Abstract

The current research was conducted in order to examine what psychological mechanisms are associated with cognitive and emotional complexity in old age. The research examined a novel and integrative theoretical model, which assessed the connection between the subjective perception of distance to death to cognitive and emotional complexity, while taking into account central relevant variables: the hostile world scenario and future time perspective.

Cognitive-emotional complexity reflects the ability to contain negativity and positivity together. Accordingly, central theories in late-life psychology maintain that when individuals are able to perceive and experience reality in a complex manner, they are also capable of finding solace from other sources in light of age-related losses (Labouvie-Vief, 2003, 2009; Labouvie-Vief & Diehl, 2000; Labouvie-Vief, Grühn, & Mouras, 2009; Labouvie-Vief, Grühn, & Studer, 2010; Labouvie-Vief & Marquez, 2004). Thus, for example, one can find solace in the social relationships with grandchildren or family members after the social ties of one's workplace has abated. The subjective distance to death reflects the individual's well-being which is related to cognitive and emotional complexity. Therefore, we hypothesized that shortened distance to death will be associated with decreased cognitive and emotional complexity.

The main contribution of the research is the examination of the psychological mechanisms, which account for the relationship between one's subjective distance to death and one's complexity. We examined whether one's perception of the hostile world scenario mediates the relationship between subjective distance to death and complexity. In addition, we examined if one's future time perspective has a regulating effect, and thus moderates this relationship beyond the aforementioned mediation.

Two studies were conducted to examine these mechanisms and relationship via two models. Model 1 suggested that the individual's involvement in the hostile world scenario mediates the connection between subjective distance to death and complexity. The hostile world scenario refers to the imagined perception people have regarding real or future threats, which may jeopardize their physical or psychological completeness, and challenge the ability for subjective well-being. Based on the theoretical background, we assumed that when death is perceived to be close, the

hostile world scenario is augmented, and individuals find it difficult to preserve a positive psychological environment, and accordingly, cognitive and emotional complexity will be low. In the first study, complexity was measured as a single concept, which contained both emotional and cognitive aspects, using a cross-sectional design of 1,073 older adults (aged 50-86).

In the second study, Model 2 was applied, which includes a partial replication of the different correlations between subjective distance to death, cognitive and emotional complexity, mediated by a hostile world scenario. In addition, the moderating role of future time perspective was examined. Future time perspective relates to goals and perceptions held by individuals regarding their remaining time span, and the extent to which the future is perceived as full of advantages and opportunities, as opposed to losses and disadvantages. At this stage, cognitive and emotional complexity were assessed as separate indices, in order to examine whether the hypothesized network of connections works similarly with both types of complexity. This study involved a within-subject diary design, which included 188 adults (ages 29-100). We hypothesized that when there is a broad future time perspective, the connections between subjective distance to death and the hostile world scenario and both cognitive and emotional complexity will decrease.

We examined the hypotheses through a series of hierarchical regressions. The findings confirmed Model 1. Thus, positive engagement with the hostile world scenario mediated the connection between distance to death and cognitive-emotional complexity, and this was replicated in the second study, when cognitive and emotional complexity were examined separately. Similar findings were not found with regard to the mediating role of a negative engagement in the hostile world scenario. These findings can be explained by the Happiness-in-the-Face-of-Adversity theory (Shmotkin, 2005), which postulates that individuals employ the subjective sense of well-being and meaning in life in order to regulate the hostile world scenario. When the negative aspects of the hostile world scenario are prominent, the ability to regulate the subjective sense of well-being is compromised, and subsequently, complexity decreases. Conversely, when the positive aspects of the hostile world scenario are prominent, it is perceived as less threatening due to the regulation system, and consequently, individuals' complexity increases.

In the examination of Model 2, findings partially confirmed the moderating role of future time perspective on the relationship of distance to death with emotional complexity. Among individuals with a narrow future time perspective, low emotional complexity was found when death was perceived as near, whereas among individuals with a broader future time perspective, no significant connection was found between distance to death and emotional complexity. The hypotheses were not confirmed in the analyses concerning cognitive complexity. In other words, when individuals have a broad future time perspective, which is full of plans, and focus on opportunities, which can still be realized, it is possible to maintain a complex emotional perception of reality, even when death is perceived as near.

As stated, we separated in the second study between the two different unique complexity components, namely, cognitive and emotional complexity. The findings show that while emotional complexity decreases as one feels closer to death, one's cognitive complexity remains unaffected by one's subjective distance to death. It also appears that cognitive complexity is expressed as the ability to live in a less consistent way of life and in a paradoxical manner, without experiencing stress or discomfort. It appears that this latter capacity is related to both one's experience and education level.

The research's findings contribute to the current knowledge in several aspects. First, the results emphasize the importance of the subjective perception of distance to death as an important developmental marker, which is connected to the individual's cognitive and emotional complexity, beyond one's chronological age.

An additional theoretical-methodological contribution lies in the thorough examination of the concepts of emotional and cognitive complexity. The first study employed a unique definition of cognitive-emotional complexity; well-being and psychological distress were used to examine complexity, since they represent two connected, albeit separate, experiences indicating the individual's mental state. In the second study, the two different definitions of estimating emotional complexity were addressed for the first time within the same study. One measure that examines the ability to feel simultaneously contradictory emotions (i.e., a covariation score) and a measure that relates to one's ability to distinguish between these emotions (i.e., a component score). The obtained replication across these different measures indicates their underlying similarity.

The results have important applied implications in the fields of education and psychology. Based on the findings, it is possible to derive educational and therapeutic intervention programs, which will provide individuals from a very young age with the ability to preserve a wide future time perspective and to alter their attitudes toward the end of life, while promoting a more positive world view in light of the hostile world scenario.

In conclusion, the current study contributes to the understanding of the theoretical connections between the variables and mechanisms, which may account for emotional and cognitive complexity among adults and older adults, while taking into consideration the perception of distance to death. The concepts are important for understanding the well-being of people along the life span, and in particular, during old age. Examining these mechanisms will assist the planning and the improvement of individuals' well-being