The general factor of personality is related to emotional, psychological, and social well-being

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BACKGROUND
The general factor of personality is defined as a blend of socially desirable attributes of basic personality traits. It is related to a variety of socially desirable qualities, including emotional well-being. However, its relationship with psychological and social well-being has been underexplored.

PARTICIPANTS AND PROCEDURE
Across three studies (N = 556, N = 448, N = 3,294) from three different countries (Poland, Spain, and USA), we show that the general factor of personality is highly related to a general factor of well-being and to its specific dimensions.

RESULTS
Results from Study 1 confirmed this association using a basic measure of well-being (i.e., the Mental Health Continuum), results from Study 2 confirmed this association using six specific measures of well-being, while results from Study 3 reproduced a congruent result using a large-scale community sample.

CONCLUSIONS
Our findings align with the existing literature stressing the positive link between the general factor of personality and aspects of well-being.

KEY WORDS
personality; well-being; general factor of personality

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BACKGROUND

The general factor of personality (GFP) is interpreted as a basic personality disposition that integrates the most basic, non-cognitive dimensions of personality (Musek, 2007). The GFP is hypothesized to be a personality metatrait, that is, a theoretical construct representing the broadest dimension of personality. Personality metatraits are combinations of shared variance of more basic personality scales, such as the Big Five or HEXACO (Anglim et al., 2020; Van der Linden et al., 2012). Research has revealed that the GFP is associated with the most optimal configuration of all functional aspects of personality, and as a result, the GFP is expected to reflect the socially desirable qualities facilitating functioning in a wide range of life situations, namely ego-resiliency, self-esteem, and self-assessed intelligence (Cieciuch & Strus, 2017; Musek, 2007; Zajenkowski et al., 2022).

Research also indicated that the GFP is associated with well-being (Musek, 2007), a finding that might be unsurprising considering (1) the optimal configuration of the GFP and (2) that the basic personality traits are recognized as good predictors of psychological and subjective well-being (Anglim et al., 2020). But despite the strong theoretical foundations, the associations between the GFP and well-being have only been explored by Musek (2007). Nevertheless, the variables included in that study (i.e., positive and negative affect and life satisfaction) were not exhaustive in the assessment of well-being, as it neglected psychological and social aspects (Ryff & Keyes, 1995).

The operationalization of well-being has long been addressed following the hedonic and eudaimonic perspectives of well-being. The hedonic perspective focuses on subjective evaluations of life satisfaction and affect to describe subjective well-being (Diener, 1984). However, subjective well-being has been criticized for excluding key components of positive functioning, such as relatedness, autonomy or meaning in life (Deci & Ryan, 2008), reinforcing the idea that the achievement of well-being cannot just embrace the individual sphere since it is closely related to environmental variables (Diener et al., 1999). As such, the eudaimonic perspective included aspects of personal (i.e., psychological well-being) and social functioning (i.e., social well-being) in the operationalization of well-being. Taking these three dimensions together, Keyes (2002) proposed the tripartite model of well-being to integrate subjective, psychological, and social well-being as constituent elements of mental health. This approach entailed a significant advance in the definition of well-being within the framework of mental health because it emphasized social well-being as an important dimension beyond the enactment of pleasure and the development of the human potential.

CURRENT STUDY

The goal of the current multi-study is to explore the relationships between the GFP and the different indicators of well-being. Research indicates that the GFP is associated with heightened levels of emotional well-being (Musek, 2007). However, the extent to which the GFP relates to psychological and social well-being has been underexplored. A substantive theoretical body of evidence suggests that the GFP is related to diverse socially desirable qualities (Cieciuch & Strus, 2017; Musek, 2007; Rushton & Irving, 2011; Zajenkowski et al., 2022). Therefore, we hypothesized that the GFP would be related either to the general factor of well-being or to its specific indicators. To test this hypothesis, we conducted two independent studies and we analyzed publicly available data from an American community sample. In the first study, we examined how the GFP is related to the general factor of well-being as conceptualized by the tripartite model of well-being (Keyes, 2002). In the follow-up study, we examined the associations between the GFP and the three dimensions of well-being as latent constructs. Finally, in the third study we assessed the degree of association with the general factor of well-being. The hypotheses presented in the current manuscript were not pre-registered.

PARTICIPANTS AND PROCEDURE

PARTICIPANTS

Study 1. The Polish sample included 556 participants (411 females, 144 males, and 1 other) with an overall mean age of 23.48 years (SD = 4.60, range 16-70 years old). The sample was a mixture of students (54.5%) and community participants (45.5%). The work presented in this manuscript was part of a larger data collection effort (see https://osf.io/uhyr9/).

Study 2. The Spanish sample included 448 participants (320 females, 127 males, and 1 other) with an overall mean age of 22.85 years (SD = 5.29, range 18-65 years old). The sample included undergraduates (85.5%) and community participants (14.5%).

Study 3. The data were obtained from the third wave of the MIDUS series (Midlife in the United States; Ryff et al., 2014). The sample included 3,294 participants (1,810 females, 1,484 males) with an overall age mean of 63.64 years (SD = 11.35, range 39-93 years old). The database is publicly available and can be accessed through: https://www.icpsr.umich.edu/web/ICPSR/series/203.

MEASURES

Assessment of the GFP. In the three studies, we measured basic personality traits from the Big Five model
through the Big Five Inventory-2 (Soto & John, 2017), a 60-item self-report questionnaire in which respondents rate their agreement with each statement using a five-point Likert-type scale. The items were mean-scored to calculate composite scores of negative emotionality (i.e., neuroticism; \( \alpha_{\text{study1}} = .90; \alpha_{\text{study2}} = .87 \)), extraversion (\( \alpha_{\text{study1}} = .90; \alpha_{\text{study2}} = .84 \)), open-mindedness (i.e., openness to experience; \( \alpha_{\text{study1}} = .78; \alpha_{\text{study2}} = .80 \)), agreeableness (\( \alpha_{\text{study1}} = .83; \alpha_{\text{study2}} = .78 \)) and conscientiousness (\( \alpha_{\text{study1}} = .88; \alpha_{\text{study2}} = .86 \)). In the MIDUS study, participants indicated their degree of agreement with five adjectives per trait. These five scales were entered into a principal axis factor analysis with a forced one-factorial solution. The factor scores of the estimated latent variable (which explained 41.96% of the observed variance in Study 1, 39.68% in Study 2, and 32.22% in Study 3) were then saved as a new individual variable. The factor loadings for this factor analysis were: negative emotionality (\( \lambda_{\text{study1}} = -.69; \lambda_{\text{study2}} = -.52; \lambda_{\text{study3}} = -.23 \)), extraversion (\( \lambda_{\text{study1}} = .72; \lambda_{\text{study2}} = .62; \lambda_{\text{study3}} = .76 \)), open-mindedness (\( \lambda_{\text{study1}} = .30; \lambda_{\text{study2}} = .30; \lambda_{\text{study3}} = .66 \)), agreeableness (\( \lambda_{\text{study1}} = .33; \lambda_{\text{study2}} = .58; \lambda_{\text{study3}} = .60 \)) and conscientiousness (\( \lambda_{\text{study1}} = .54; \lambda_{\text{study2}} = .45; \lambda_{\text{study3}} = .43 \)).

Assessment of Well-Being – Study 1. We used the Mental Health Continuum (Keyes, 2002), a 14-item self-report that measures mental well-being, including indicators of emotional, psychological, and social well-being. Respondents rate how frequently they felt certain emotions and beliefs during the last month on a 6-point Likert-type scale. The factor loadings of the general factor of well-being were: emotional \( \lambda = .93 \); psychological \( \lambda = .82 \); social \( \lambda = .74 \).

Assessment of well-being – Studies 2 and 3. While in Study 1 only brief measures of three indicators of well-being were used, in Studies 2 and 3 a broad array of existing measures were included. To assess the emotional component of subjective well-being, we used the 20-item self-report Positive and Negative Affect Schedule (Watson et al., 1988), which evaluates how individuals feel in a certain way at the present moment on a 5-point Likert scale, and the 4-item self-report of Subjective Happiness Scale (Lyubomirsky & Lepper, 1999) in which respondents rate the extent to which they feel characterized by happiness statements using a 7-point Likert scale. To capture the cognitive component of subjective well-being, we used the 5-item Satisfaction with Life Scale (Diener et al., 1985) to evaluate the degree of satisfaction with life as a whole on a 7-point Likert-type scale. Psychological well-being was measured using the 39-item self-report of Ryff’s Psychological Well-being Scale (Ryff & Keyes, 1995) that evaluates six dimensions (self-acceptance, autonomy, life purpose, personal growth, positive relationships and environmental mastery) on a 7-point Likert-type scale. Finally, to assess social well-being, we used the Social Well-being Scale (Keyes, 1998), which captures the five dimensions [social] acceptance, coherence, integration, contribution, and actualization on a 7-point Likert scale. As in Study 1, principal axis factor analysis with a forced one-factorial solution was executed for each of the three well-being indicators. The scales accounted for 67.63% of variance in emotional, 50.18% in social, and 59.84% in psychological well-being. In Study 2, the factor loadings were: emotional \( \lambda = .82 \); psychological \( \lambda = .95 \); social \( \lambda = .82 \). In Study 3, the factor loadings were: emotional \( \lambda = .53 \); psychological \( \lambda = .92 \); social \( \lambda = .63 \).

RESULTS AND DISCUSSION

The descriptive statistics and the relationships between the GFP and the different dimensions of well-being are presented in Table 1. The results revealed that, across studies, the GFP was consistently related to the general factor of well-being as well as to its more specific dimensions. The strength of these relationships was congruent despite using a single measure (Study 1) or multiple scales from convenience and representative samples (Studies 2 and 3, respectively). Although many studies describe the GFP in terms of high well-being, extant research is limited to only one empirical comparison of its relation to emotional well-being (Musek, 2007), which does not represent all indicators of well-being (Ryff & Keyes, 1995). Therefore, we not only replicated existing findings (Musek, 2007), but also provided robust evidence relating the GFP to different well-being dimensions. In fact, the associations of the GFP were higher for psychological than for emotional and social well-being. Overall, the findings suggest that the optimal functional configuration of the GFP (Rushton & Irving, 2011) is not only confined to pleasurable experiences (emotional well-being), but it also reflects features of positive functioning concerning the realization of human potential and meaningful activities (psychological and social well-being), which are connected to the eudaimonic perspective of well-being (Deci & Ryan, 2008). Consistent with the tripartite model of well-being (Keyes, 2002), we can propose that the GFP would represent variance in indicators of emotional, psychological, and social well-being and might therefore enhance optimal psychosocial functioning.

LIMITATIONS

Our findings are limited to cross-sectional self-report data. However, the results conceptually replicated across three different countries worldwide. The structure of the GFP might be different across honest and faking good testing conditions, and the
The general factor of personality and well-being

Table 1

<table>
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<tr>
<th>Study 1</th>
<th>M</th>
<th>SD</th>
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Note. GFP – general factor of personality; GFW – general factor of well-being. Results for specific well-being scales are available at the OSF project site. The mean values for GFP, GFW, and well-being dimensions in Study 2 equal zero as they are latent variables. All correlations were significant at \( p < .001 \).

literature suggests that the structure replicates best under fake-bad instructions (Schermer et al., 2019). Furthermore, the structure of the GFP might also be influenced by social desirability and impression management (Schermer & Holden, 2019). It would be interesting to include measures of social desirability to test for potential measurement artifacts in future research. Although the current study did not account for testing conditions, the empirical structure of the GFP was congruent with that presented in previous research (Schermer et al., 2019).

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Supplementary materials are available on journal’s website.

DISCLOSURE

The authors declare no conflict of interest.

REFERENCES


