Fear of poverty – verification of its relationship to socio-economic status and selected personality variables

Monika Kačmárová, Institute of Psychology, Faculty of Arts, University of Prešov, monika.kacmarova@unipo.sk
Peter Babinčák, Institute of Psychology, Faculty of Arts, University of Prešov, peter.babincak@unipo.sk
Dana Vargová, Institute of Psychology, Faculty of Arts, University of Prešov, dana.vargova@unipo.sk


Abstract:
In psychology literature, the interest in poverty is traditionally represented by two constructs – poverty attributes (Feagin, 1972; Heider, 1958) and the attitudes to poverty (Cozzarelli, Wilkinson, & Tagler, 2001). The present study proposes the concept of "the fear of poverty", which appears to be accessible to psychological research. In addition, based on the information from various transnational surveys (such as Eurobarometer), the concept presents the present reality for a considerable part of the Slovak population. When analyzing the fear of poverty, there are two ways of conceptually understanding this. One represents the view that the fear of poverty can be a manifestation of a more general personality trait, which predisposes the person to uncertainty and fear of future material shortage. In this way, the fear of poverty could be relatively independent of the person's situation. The other possibility is to consider the fear as the emotional consequence of the person's unfavorable economic or social situation. Due to the absence of relevant literature sources addressing the fear of poverty, the present research is of an exploratory nature.

Research objective: The aim of the research was to examine the relationship between the indicators of socio-economic status (financial stress, education, employment status) and selected personality traits (neuroticism, extraversion, conscientiousness) to the fear of poverty. Within the examined socio-economic variables, the hypothesis of a positive relationship between financial stress and the fear of poverty was formulated. We made the assumption that the unemployed and less-educated people would exhibit a higher level of the fear of poverty. Furthermore, we hypothesized a negative relationship between extraversion and the fear of poverty and a positive relationship of neuroticism and conscientiousness to the fear of poverty.

Research method: A total of 115 respondents aged 18-62 (M = 32.35; SD = 11.16) participated in the survey, consisting of 58 men and 57 women. The respondents were from the Košice region. To determine the level of the fear of poverty, the authors’ 11-point answer scale was used. At the same time, an item with a "I have a / I have no fear of poverty" dichotomous response scale was included in order to validate the assessment of the fear of poverty. Selected personality traits (neuroticism, extraversion, conscientiousness) were assessed using the NEO-FFI five-factor personality inventory subscales (Ruisel & Halama, 2007). Financial stress was measured using the Financial Stress Questionnaire (Bačíková-Slešková et al., 2007). Finally, highest level of education achieved and the current employment status were included in the socio-demographic questionnaire.
Results and Discussion: In order to assess the fear of poverty, a simple form of an 11-point answer scale was used. This way, the respondents could express different levels of the assessed variable in a more sensitive way than with the dichotomous scale. At the same time, the 11-point answer scale differentiates better between those participants who claimed they are afraid of poverty and those who claimed they are not. A multiple hierarchical linear regression analysis (the stepwise method) was carried out to examine the relationship of the indicators of socio-economic status (financial stress, education, employment status) and selected personality traits with the fear of poverty. The results of the analysis showed that within the examined personality traits, neuroticism was a significant predictor of the fear of poverty; explaining 6% of variance in the dependent variable. Out of the selected indicators of socio-economic status, financial stress (24%) and employment status (5%) became significant predictors. Based on these findings it can be stated that employees with higher levels of financial stress and neuroticism showed a higher level of the fear of poverty. No relationship between the other variables and the fear of poverty was present. On the basis of the findings, it cannot be clearly understood if the fear of poverty results from a person experiencing an unfavorable socio-economic situation or, rather, due to a personality trait. As a possible hypothesis explaining the relationships of these variables, a mediation model could be designed. In such a model, the relationship between socio-economic status and the fear of poverty would be mediated by personality variables and particularly by the neuroticism of a person; which shows the relationship to financial stress \((r = -0.45)\) as well as to the fear of poverty \((r = -0.49)\). For this type of analysis, however, more extensive research is needed, especially in relation to the sample size.

Conclusion: In the present research, the hypotheses about the relationship between personality variables (neuroticism in particular) and the indicators of socio-economic status (financial stress) to the fear of poverty was confirmed. Moreover, another hypothesis about the assumed interrelationship between them was formulated. The research carried out was the first attempt (at the national level) to explore the issue of the fear of poverty with a focus on psychological variables, and thus aimed at enriching the knowledge base in an area which has traditionally been dominated by economic and social sciences.

Key words: Fear of poverty. Personality traits. Socio-economic status.

Theoretical Background

In 2016, the daily newspapers (SME, Dnes24, Pravda, and others) published a survey (conducted for Pioneer Investments by the Stem Mark company) which drew attention to the fact that nearly seven out of ten Slovaks are afraid of financial stringency and poverty, and more than half of the sample of 500 respondents feel uncertainty and the fear of long-term poverty. These concerns are greater than the fear of terrorism, long-term illness or an immigration crisis in Slovakia. Similarly, the regularly conducted Eurobarometer survey addressing the concerns of the European Union (EU) citizens, including Slovakia, asked about the two most important current issues; with the economic situation as one of the options. 19% of Slovaks chose this option, which is a smaller percentage compared with the fear of unemployment (34%) and health and social security (33%), but is still a relatively high proportion (European Commission, 2016).

The issue of poverty is not traditionally explored within the psychological sciences, as it is more often understood as an objective category which is more at the center of interest of sociology or economics. Deficiencies in conceptualizing poverty as an objective category – poverty independent from the opinion of the person being assessed - led to the introduction of other concepts representing the expression of a person's own experience; labelled as


2 For comparison with the previous survey, the results from the 2016 survey are presented. More recent findings are similar, with 20% in the spring of 2018 and 15% in the autumn of 2018, see http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/index?p=1&instruments=STANDARD
subjective poverty or the subjective limit of poverty (Mareš & Rabušic, 1996; Sirovátka & Večerník, 2002). These are, however, used rather in the economic and sociological sciences. The most commonly used constructs that comprise the specific psychological dimension of poverty are the attributions of poverty that express people's beliefs about the cause of a person's poverty (Feagin, 1972; Heider, 1958) and the attitudes to poverty (Cozzarelli, Wilkinson, & Tagler, 2001). However, the above-mentioned issue of the fear of poverty is not identical to those constructs and represents an area open to psychological research.

In a very simplified way, there are two ways of conceptual appreciation when analyzing the fear of poverty. Firstly, the fear of poverty can be a manifestation of a more general personality trait predisposing the person to uncertainty and fear of future material want. In this way, the fear of poverty could be relatively independent of a person's situation. The other possibility is to consider fear as the emotional consequence of the person's unfavorable economic or social situation. These suggested possibilities for conceptualizing the concept of the fear of poverty allows for the psychological terms such as the "fear" of poverty or "anxiety" associated with the anticipation of poverty. Due to the lack of relevant literary sources, the present research is of an exploratory nature, and, for the time being, the question of conceptualizing the construct of the fear of poverty cannot be adequately addressed with certainty yet. One of the aims of this paper is to get a better understanding of the “fear of poverty” concept and to look to ways of collecting empirical evidence explaining the properties of the construct.

It is not easy to examine the connection of various aspects of poverty and personality variables, as poverty is not uniformly defined and there are several different poverty indicators available. Within representative samples, Tharp (2012) proved a positive relationship between extraversion and financial satisfaction and a negative relationship between conscientiousness and financial satisfaction at the national level. At the individual level, he noted a positive relationship with extraversion and a negative relationship with neuroticism and satisfaction to financial satisfaction. Larsson and Sevä (2012) examined the personality traits of the poor and found a lower score of extraversion, conscientiousness and openness to experience, and a higher score of neuroticism and satisfaction. It is, however, important to note that the cited sources are not from the psychological field.

Regarding impact, poverty produces stress and other negative affective states that lead to short-sighted decision-making and unwillingness to take risks (Haushofer & Fehr, 2014). The more elaborated mechanism of the consequences of poverty, or the theoretical model of why poverty perpetuation occurs, was outlined by Adamkovič and Martončik (2017). The authors hypothesize the way poverty creates a heavy cognitive load (negative affect and stress), which is subsequently reflected in deteriorated executive functions, tendencies to impulsive behaviors and subsequent (objectively) less favorable economic decision-makings. Thus, this leads to a cycle of poverty perpetuation and repeatedly causes negative affects or stress. Poverty-related concerns exhaust one's mental reserves (Mani et al., 2013). All of this can lead to the more frequent experiencing of negative emotions and a negative attitude to one's own future. Several other studies show the link between poverty and depression (Denny et al., 2004; Heflin & Iceland, 2009; Najman et al., 2010; Spence et al., 2002).

Entering the key word „fear of poverty“ into the Web of Science database brought six results by the end of 2018. Most of these six sources came from fields other than social sciences and thus not applicable for the use in our research. Similar results were obtained when entering the modifications of the key word.
The aim of the research was to examine the relationship between the selected indicators of socio-economic status (financial stress, education, employment status) and selected personality traits (neuroticism, extraversion, conscientiousness) to the fear of poverty. The following hypotheses were formulated based on a theoretical basis and the stated goal:

H1: We hypothesize a statistically significant relationship between socio-economic status and the fear of poverty. Specifically:

H1.1: there is a positive relationship between financial stress and the fear of poverty,
H1.2: the unemployed and low-educated people exhibit a higher level of the fear of poverty.

H2: We hypothesize a statistically significant relationship between selected personality traits and the fear of poverty. Specifically:

H2.1: there is a negative relationship between extraversion and the fear of poverty,
H2.2: there is a positive relationship of neuroticism and conscientiousness to the fear of poverty.

Research Method

Research sample
To get a preliminary insight into the topic a sample of 115 respondents was selected by occasional convenience sampling method. The respondents were from the Košice region and consisted of 58 men (50.4%) and 57 women (49.6%) aged 18-62 (M = 32.35; SD = 11.16). Among them, 78 people were unmarried (67.8%) and 37 people were married (32.2%), and 78 people were employed (67.8%) and 37 people were unemployed (32.2%). Their highest educational attainment was high school degree (n = 51; 44.3%) or university degree (n = 64; 55.7%).

Research instruments
The sociodemographic questionnaire investigated: age, gender, highest degree of education achieved, marital and employment status (employed/unemployed). At the same time, we also surveyed the number of people living in the household of the respondent, as well as the number of children under the age of 18 living in the household.

The Financial Stress Questionnaire (Bačíková-Slešková et al., 2007) is focused on a subjective assessment of one's own financial situation using four questions identifying the financial possibilities of respondents when undertaking certain activities. An example of an item/question being: "Have you recently experienced that you didn't have enough money to buy clothes you wanted?" With a respondent answering "yes" = 1 or "no" = 2. The higher the respondent scores, the lower financial stress they experience. In our research, one of the four items was modified; namely the item "go to the disco", which was replaced with "have dinner at a restaurant" due to the age distribution of the research sample. The questionnaire was evaluated by a summary score.

NEO-FFI (Costa & McCrae, 1992) is a five-factor personality inventory that was administered to measure three selected personality traits – extraversion, neuroticism, and conscientiousness. An example of an item in the extraversion subscale is: "I'm a cheerful, high-spirited person." Each of the subscales contains 12 items and the respondent assesses the validity of the statement on the 5-point response scale. The Slovak version of the instrument by Ruisel and Halama (2007) was administered.
To measure the fear of poverty, we used a one-dimensional scale with the instruction, "On the given scale, express the fear of your own poverty by circling a number from 0-10, where 0 means I have no fear and 10 means I have great fear." In order to validate the assessment of the fear of poverty, a response scale assessing the fear of poverty as a "I have / I have no fear of poverty" dichotomy was included in the questionnaire battery. A comparison of the different forms of the answer is displayed in the results section.

The test battery was administered to respondents individually between February and March 2018.

Results

The data was processed using the SPSS 18 statistical program. The normality of data distribution was verified using a skewness test. Since the data of financial stress variable did not have normal distribution, they were normalized by the method of exponentiation (after the adjustment, the skewness value was -.93; standard skew error .23). The descriptive characteristics of the examined variables are shown in Table 1.

Table 1: Descriptive analysis of the examined variables

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear of poverty</td>
<td>0</td>
<td>9</td>
<td>4.0</td>
<td>2.45</td>
<td>.44</td>
<td>-</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>4</td>
<td>35</td>
<td>17.8</td>
<td>5.76</td>
<td>.31</td>
<td>.80</td>
</tr>
<tr>
<td>Extraversion</td>
<td>15</td>
<td>46</td>
<td>32.8</td>
<td>6.50</td>
<td>-.31</td>
<td>.80</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>17</td>
<td>43</td>
<td>31.0</td>
<td>5.65</td>
<td>-.16</td>
<td>.80</td>
</tr>
<tr>
<td>Financial stress</td>
<td>4</td>
<td>8</td>
<td>7.0</td>
<td>1.29</td>
<td>-.16</td>
<td>.77</td>
</tr>
<tr>
<td>Financial stress normalized</td>
<td>16</td>
<td>64</td>
<td>51.1</td>
<td>16.3</td>
<td>-.93</td>
<td>.77</td>
</tr>
</tbody>
</table>

Note: Min – minimal value, Max – maximal value, M – mean value, SD – standard deviation, α – Cronbach's alpha

Table 2 illustrates the distribution of the fear of poverty that enables a comparison of the respondent’s answers using the 11-point scale and dichotomized responses. When comparing the scaled responses in the dichotomous "I have fear" versus "I have no fear" group, it is possible to identify that the 11-point scale differentiates better among those who stated they are or are not afraid of poverty (different distribution of responses – Fisher's exact test got the value of 77.4 ***; alternatively, when comparing two frequency distributions, Kolmogorov-Smirnov test got the value of .76 ***).
Fear of poverty – verification of its relationship to socio-economic status and selected personality variables

Table 2: Scoring of the fear of poverty variable by two response formats

<table>
<thead>
<tr>
<th>Fear of poverty:</th>
<th>I have no fear</th>
<th>I have fear</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (no fear)</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>10 (great fear)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>49</td>
</tr>
</tbody>
</table>

In order to examine the relationship of selected personality traits and socio-economic status indicators (financial stress, education, employment status) to the fear of poverty, a multiple hierarchical linear regression analysis (stepwise method) was carried out. Prior to the regression analysis the collinearity diagnostics was performed. As a result, none of the selected predictors reached the tolerance value lower than 10, and at the same time the VIF did not exceed the value higher than 10. Based on this, all selected predictors were included in the analysis. The controlled variables were: age, gender, marital status, number of people in the household and number of children under the age of 18. The variables entered in the following blocks: block 1 comprised sociodemographic variables – age, gender, marital status, number of people in the household and children under the age of 18; block 2 consisted of financial stress, education, and employment status; and block 3 included personality variables – neuroticism, extraversion, and conscientiousness. The results of the regression analysis are presented in Table 3.

Table 3: Regression model for age, gender, marital status, number of people in the household, number of children under the age of 18, extraversion, neuroticism, conscientiousness, financial stress, education and employment status as criterion predictors of the fear of poverty (accepted models; \( p < .05 \))

<table>
<thead>
<tr>
<th>Predictor</th>
<th>R</th>
<th>R² change</th>
<th>b</th>
<th>( \beta )</th>
<th>T</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear of poverty (( F_{total} (3,111) = 21.575; \ p &lt; .000 ))</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>financial stress – norm.</td>
<td>.511</td>
<td>.26***</td>
<td>-.061</td>
<td>-.408</td>
<td>-4.697</td>
<td>.000</td>
</tr>
<tr>
<td>employment status</td>
<td>.553</td>
<td>.05**</td>
<td>-.879</td>
<td>-.169</td>
<td>-2.172</td>
<td>.032</td>
</tr>
<tr>
<td>neuroticism</td>
<td>.607</td>
<td>.06**</td>
<td>.121</td>
<td>.285</td>
<td>3.315</td>
<td>.001</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.248</td>
<td></td>
</tr>
</tbody>
</table>

Note: ** stands for \( p < .01 \), *** stands for \( p < .001 \). The fear of poverty ranges from 0 to 10; neuroticism ranges from 0 to 5; the high score in the stated variables indicates a strong construct measure; normalized financial stress ranges from 16 to 64: the low value indicates a strong construct measure and the high value indicates a weak construct measure. Employment status takes values 0 = employed and 1 = unemployed.
Regression analysis showed that out of the tested predictors, three predictors were significant; namely financial stress, employment status, and neuroticism, which together explained 37% of the fear of poverty variance. Financial stress explained 26% of the variance. The higher the level of financial stress respondents expressed, the higher the level of the fear of poverty they reached. Employment status explained 5% of the variance, and hence the employed showed a higher level of fear of poverty. Neuroticism contributed 6%, which means that people with a higher level of neuroticism showed a higher level of fear of poverty.

Discussion

The issue of poverty can be considered continuously topical in Slovakia. The fight against poverty is one of the strategic objectives of EU policies within the programming period set for the decade 2010-2020, despite the fact that in terms of the well-being of its citizens, the European area is incomparable with the countries traditionally struggling with poverty. This suggests that poverty has a culturally specific context and can also be present in economically developed countries. The issue of defining poverty goes beyond the aims of this study, especially because it is not primarily a psychological concept. In our research, we focused on the concept that reflects people's attitudes and expectations of what they consider to be poverty. Lacking the studies with a similar focus, the conducted research can be considered as the first attempt to examine the issue of the fear of poverty and its predictors.

Regarding the measurement of the fear of poverty, we chose a simple form of single-item questioning with an 11-point answer scale, meaningfulness of which was also verified by a simplified form of a question with two answer options. The values of the dichotomously assessed fear of poverty corresponded with the scaled values. At the same time, the distribution of scaled values of the fear of poverty covered almost the entire continuum with the exception of the extreme value of 10. The answers were not grouped around the extreme poles of the answer options and the use of the scaled form seems appropriate for a more sensitive differentiation of people's attitudes and expectations regarding their own poverty.

The aim of the research was to examine the relationship between two groups of predictors – personality traits (neuroticism, extraversion, conscientiousness) and socio-economic status indicators (financial stress, education, employment status) – and the fear of poverty in regression models. The results showed a significant positive relationship between neuroticism and the fear of poverty; however, no significant relationship of extraversion and conscientiousness to the fear of poverty was found. Neuroticism is a personality trait in the Big Five model, characterized as "a general tendency to experience negative affects" such as fear, threat, or frustration, as well as an inclination to negative psychological stress (Ruisel & Halama, 2007, p. 12). Out of the five components of personality, neuroticism is the most similar to the fears related to different aspects of life, including poverty. From this viewpoint, the observed finding is not surprising. Of the selected indicators of socio-economic status, financial stress and, to a lesser extent, employment status proved to be significant predictors. People with a higher level of financial stress also showed a higher level of the fear of poverty. Financial stress is used as a subjective indicator of a person's financial situation and in some cases it is considered more appropriate than other objective indicators of financial situation (Hagquist, 1998). Compared to neuroticism (6%), financial stress, with 26% of the explained variability of the dependent variable, represented a more significant predictor in the regression equation. An interesting finding was a small but significant contribution of employment status to the variability of the fear of poverty, which, unlike the previous two significant predictors, scored contrary to expectations. A higher score of the fear of poverty was recorded in the
Fear of poverty – verification of its relationship to socio-economic status and selected personality variables

employed. Due to the sample size and the pilot nature of the research we cannot formulate further interpretations of this finding, as further examination is required. Based on these findings it is difficult to decide unequivocally how to understand the fear of poverty; whether it results from experiencing an unfavorable socio-economic situation or it is rather a personality trait. As a possible hypothesis for explaining the relationships of these variables, it would be possible to construct a mediation model where the relationship between socio-economic status and the fear of poverty would be mediated by personality variables, and by the neuroticism in particular, since it has a relationship with both financial stress ($r=-.45$) and the fear of poverty ($r=.49$). However, more extensive research is needed for this type of analysis, especially with regard to sample size.

The conducted research has several limitations related mainly to the nature of this first attempt to examine the issue of the fear of poverty. From the methodological point of view, it is essentially the minimalistic research design with the occasional sampling method and the small sample of respondents with high school and university degree. The region the respondents come from or the duration of unemployment among unemployed respondents are the external variables which may interfere, and thus it is necessary to control them in any further study. Regarding the measurement of the fear of poverty, a simple method of single-item questioning with a both scaled and dichotomous form of response was chosen. For future research, it is advisable to collect a set of statements about the fear of poverty and try to construct a multi-item scale, where the psychometric parameters could be assessed better. However, for the time being, a single-item form of answer seems applicable in differentiating among respondents in terms of the fear of poverty.

Conclusion

The present research confirmed the hypotheses about the relationship of personality variables (neuroticism) and socio-economic status indicators (financial stress) to the fear of poverty. Moreover, we formulated another hypothesis about the anticipated relationship between them.

The concept of the fear of poverty appears to be a potentially interesting construct open to psychological exploration, which can – within the focus of social sciences – contribute to a better understanding of poverty in terms of its subjective reflection by a person themself. The present research represents the first attempt (at the national level) to explore the issue of the fear of poverty, focusing on psychological variables in order to enrich the knowledge base in the area which has traditionally been dominated by economic and social sciences.
References


**Acknowledgements**

This work was supported by the Slovak Research and Development Agency under grant number APVV-15-0404