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PSYCHOMETRICAL PROPERTIES OF THE CONTINGENCIES OF SELF-WORTH SCALE ON A ROMANIAN STUDENT SAMPLE

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Abstract

Developed by Crocker, Luhtanen, Cooper, & Bouvrette in 2003, the Contingencies of Self-Worth Scale (CSW) is a 35-item self-report tool which assess seven domains in which people frequently base and derive their self-worth. The aim of the study is to evaluate the psychometric properties of the CSW Scale in Romanian context. The total sample size was 370 university students from different faculties (295 female and 75 male) with ages between 19 and 35 (M=24.06; SD=3.71). Exploratory and confirmatory factor analyses were performed in order to test the dimensionality of the scale. The model with seven-correlated factors of self-worth was confirmed. The results of this study support the conclusion that Romanian version of CSW Scale is a valid and reliable instrument.

Keywords: self-esteem, self-worth, contingencies of self-worth, scale, psychometric properties.

1. INTRODUCTION

People are motivated to protect and enhance their self-esteem. They aim to maintain higher levels of self-esteem and therefore seek out situations and engage in activities that provide opportunities to achieve success and avoid failure (Crocker & Wolfe, 2001; Crocker, & Luhtanen, 2003). People stake their self-esteem on specific domains where they have abilities, skills or qualities related to which are attempting to obtain success and avoid failure (Crocker & Wolfe, 2001; Crocker & Park, 2003). Such specific domains in respect of which individuals perceived success or failure at achieving goals become internal and external sources of self-estimation. The central idea of the Contingencies of Self-Worth Model, developed by Crocker & Wolfe (2001), is that individuals frequently differ in their contingencies of self-worth which represent the domains on which they base, derive, invest, and validate their self-esteem. Contingencies of self-worth are personal beliefs about what individual must be or do to have value and worth as a person. Self-evaluation in these domains affects global self-esteem only if the domains represent contingencies of self-worth. In other words, people want to succeed and not fail in domains that are related to their contingencies of self-worth unlike activities that are not linked to self-worth (Crocker & Wolfe, 2001; Crocker, Karpinski, Quinn, & Chase, 2003). Consequently, success in such self-relevant domains increases their self-esteem whereas failure diminishes it (Crocker & Wolfe, 2001; Wolfe & Crocker, 2002).

People may have different contingencies of self-worth and they vary in how strongly their self-esteem is contingent in a domain (Crocker & Wolfe, 2001; Wolfe & Crocker, 2002). For some, self-worth is staked on one domain, whereas for others may be contingent on many domains. According to CSW Model (Crocker & Wolfe, 2001) self-esteem is often contingent on at least one of seven domains, which are placed on a continuum from external to internal. In a study of contingencies of self-worth in college students, Crocker, Luhtanen, Cooper, & Bouvrette (2003) demonstrated that individuals derive self-worth from obtaining approval from other people, being physically attractive, being superior others in competition, capitalizing and reaching academic competence, experiencing love and support from family, being virtuous, or having God’s love. External contingencies include physical appearance, outdoing others in competition, academic competence, family support, and winning the approval of others, whereas internal contingencies include the domains of moral virtue and God’s love (Crocker & Wolfe, 2001). In particular, when self-esteem is contingent on a domain, people typically pursue to prove their worth by enacting behaviors that enhance their self-worth within this particular contingent domain (Crocker, Brook, Niya, et al., 2006). In other words, contingencies of self-worth have self-regulatory role because people tend to set self-validation goals in the domains on which their self-worth are

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based (Crocker & Wolfe, 2001; Crocker, Luhtanen, Cooper, & Bouvrette, 2003; Crocker, Park, & Vohs, 2006). Further, outcomes in these self-contingent domains generalize to the worth and value of the whole person (Crocker & Park, 2004).

Crocker, Luhtanen, Cooper & Bouvrette (2003) developed the Contingencies of Self-Worth (CSW) Scale, which focuses on seven domains hypothesized in the CSW Model to be important internal and external sources of self-esteem. CSW-Scale was tested to be a valid instrument in various cultures. The purpose of the present study is the adaptation and validation of the CSW-Scale in a Romanian university student sample.

2. METHOD

2.1. Participants

A total of 370 Romanian university students participated to the study. 79.7% of the sample was female and 20.3% male, with ages between 19 and 35 and a mean age of 24.6 (SD = 3.71). 71.1% participants were from urban and 28.9% from rural environment. Students were from different faculties, classes and years of study and were rewarded with course credits for their contribution to the research.

2.2. Materials

Participants completed the Contingencies of Self-Worth Scale (CSWS) (Crocker, & colleagues, 2003). The CSW scale assesses the extent to which participants base their self-worth in seven domains. The CSW is composed of 35 items measured on a seven-point Likert scale, ranging from 1 = “strongly disagree” to 7 = “strongly agree”. The seven subscales, with five items each, are: Appearance, Approval, Competition, Academic, Family, Virtue, and God’s love. In all subscales, high scores indicate high importance of the domains on which self-worth are contingent. The CSW scale was translated from English into Romanian language used the “translation/back-translation” procedure.

Participants also requested to complete the Rosenberg Self-Esteem Scale (Rosenberg, 1965) which assesses the global self-esteem. The 10 item responses were evaluated on a five-point Likert scale from 1 = “strongly disagree” to 5 = “strongly agree”. Internal consistency for the scale was Cronbach’s alpha = .76.

3. RESULTS AND DISCUSSION

According on Romanian sample obtained data, in the first step was performed an exploratory factor analysis to examine the factor structure of the CSW Scale. The factor extraction method we used was principal components analysis with direct Oblimin rotation for delta=0.2. According to the CSW Model, we impose a seven-factor solution to be extracted. All seven factors extracted explain together 62.11% of the total variance. We compare these factors with those identified by the CSW Model (Crocker et al., 2003). The first derived factor corresponded to the Competition domain, the second to God’s love, the third to Approval from others domain, the fourth to Physical appearance, the fifth corresponded to Family support, the sixth to Academic competence and the seventh to Virtue domain. All main saturations of the items from the obtained pattern matrix were greater than 0.43. Items 11, 19 and 22 have double loadings on factors. The internal consistencies and the correlations between the seven contingencies of self-worth domains are presented in Table 1.

Table 1. Internal consistencies and correlations between dimensions of the CSW Scale.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Family</td>
<td>5.71</td>
<td>1.04</td>
<td>.83</td>
<td>.23</td>
<td>.30</td>
<td>.33</td>
<td>.45</td>
<td>.32</td>
</tr>
<tr>
<td>2</td>
<td>Competition</td>
<td>5.53</td>
<td>0.97</td>
<td>.32</td>
<td>.84</td>
<td>.45</td>
<td>.17</td>
<td>.45</td>
<td>.32</td>
</tr>
<tr>
<td>3</td>
<td>Appearance</td>
<td>4.47</td>
<td>1.15</td>
<td>.25</td>
<td>.72</td>
<td>.06</td>
<td>.27</td>
<td>.09</td>
<td>.53</td>
</tr>
<tr>
<td>4</td>
<td>God’s love</td>
<td>5.2</td>
<td>1.43</td>
<td>.17</td>
<td>.09</td>
<td>.07</td>
<td>.93</td>
<td>.07</td>
<td>.32</td>
</tr>
<tr>
<td>5</td>
<td>Academic</td>
<td>5.52</td>
<td>0.87</td>
<td>.39</td>
<td>.51</td>
<td>.24</td>
<td>.20</td>
<td>.75</td>
<td>.21</td>
</tr>
<tr>
<td>6</td>
<td>Virtue</td>
<td>5.77</td>
<td>0.795</td>
<td>.26</td>
<td>.21</td>
<td>.04</td>
<td>.34</td>
<td>.31</td>
<td>.70</td>
</tr>
<tr>
<td>7</td>
<td>Approval</td>
<td>4.12</td>
<td>1.28</td>
<td>.18</td>
<td>.01</td>
<td>.01</td>
<td>.11</td>
<td>.12</td>
<td>.81</td>
</tr>
</tbody>
</table>

Note. Internal consistency indices (Cronbach’s alphas) are presented in bold on the diagonal. Correlations for this study are below the diagonal and those from Crocker’s study (2003) are above the diagonal.

**. Correlation is significant at the 0.01 level. *. Correlation is significant at the 0.05 level.

Each of the CSW-S subscales have acceptable levels of internal consistency with Cronbach’s alpha indices between .70 (for Virtue) and .93 (for God’s love), comparable with internal consistencies values reported by Crocker et al. (2003). Also, the correlations between the subscales are statistically significant and relatively.
similar with the results reported by Crocker et al. (2003). Most of the correlations indicate moderate associations between different domains of contingencies of self-worth. Item-total correlations ranged from .27 to .65 for appearance, ranged from .73 to .85 for God’s love, ranged from .58 to .69 for competition, ranged from .36 to .53 for virtue, ranged from .45 to .70 for other’s approval, .43 to .76 for family support, and ranged from .33 to .64 for academic competence.

In the second step, we aim to test the fit of Crocker’s seven factor model to our data. Following the previous studies (Crocker et al., 2003) we conducted a confirmatory factor analysis where we tested three models: 1. a model which presume two correlated factors based on the distinction between internal and external contingencies; 2. a model which presume seven correlated factors; 3. a model which presume seven correlated factors excluding item 4.

We used the maximum likelihood estimation method and reported the following fit indices: the chi-square index, RMSEA (Root-Mean-Square Error of Approximation), CFI (Comparative Fit Index), NFI (Normed Fit Index), and IFI (Incremental Fit Index). Have been taken into consideration only the smaller values than .06 for RMSEA and greater than .085/.90 for CFI, NFI, and IFI indices (Sava, 2004). The confirmatory factor analysis results are presented in Table 2. The results show that three of four fit indices have an accepted value of .90, which indicate a good model fit. Goodness-of-fit indices for the model comparisons revealed that the seven correlated-factor models are significantly better than the two correlated-factor model. Modification of the model by removing item 4, which has a saturation smaller than 0.30, has not significantly improved the fit indices than the seven correlated-factor model.

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>RMSEA</th>
<th>CFI</th>
<th>NFI</th>
<th>IFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. two correlated factors</td>
<td>3604.19**</td>
<td>559</td>
<td>0.122 (0.118 - 0.125)</td>
<td>0.518</td>
<td>0.478</td>
<td>0.520</td>
</tr>
<tr>
<td>2. seven correlated factors</td>
<td>1116.42**</td>
<td>529</td>
<td>0.055 (0.05 - 0.059)</td>
<td>0.907</td>
<td>0.838</td>
<td>0.908</td>
</tr>
<tr>
<td>3. seven correlated factors excluding item 4</td>
<td>1056.31**</td>
<td>497</td>
<td>0.055 (0.051 - 0.06)</td>
<td>0.91</td>
<td>0.845</td>
<td>0.911</td>
</tr>
</tbody>
</table>

Unstandardized and standardized item loadings are presented in Table 3. Excepting Item 4, all standardized loadings have absolute values higher than .30 (Sava, 2004).

<table>
<thead>
<tr>
<th>Scale</th>
<th>Item</th>
<th>Standardized Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 7</td>
<td>91</td>
<td>.84</td>
</tr>
<tr>
<td>Item 10</td>
<td>69</td>
<td>.44</td>
</tr>
<tr>
<td>Item 16</td>
<td>99</td>
<td>.56</td>
</tr>
<tr>
<td>Item 24</td>
<td>93</td>
<td>.67</td>
</tr>
<tr>
<td>Item 29</td>
<td>1.01</td>
<td>.89</td>
</tr>
<tr>
<td>Item 3</td>
<td>1.00</td>
<td>.73</td>
</tr>
<tr>
<td>Item 12</td>
<td>1.17</td>
<td>.79</td>
</tr>
<tr>
<td>Item 20</td>
<td>1.33</td>
<td>.81</td>
</tr>
<tr>
<td>Item 25</td>
<td>1.00</td>
<td>.60</td>
</tr>
<tr>
<td>Item 32</td>
<td>1.00</td>
<td>.65</td>
</tr>
<tr>
<td>Item 1</td>
<td>1.26</td>
<td>.56</td>
</tr>
<tr>
<td>Item 4</td>
<td>0.68</td>
<td>.26</td>
</tr>
<tr>
<td>Item 17</td>
<td>1.93</td>
<td>.87</td>
</tr>
<tr>
<td>Item 21</td>
<td>2.04</td>
<td>.83</td>
</tr>
<tr>
<td>Item 30</td>
<td>1.00</td>
<td>.41</td>
</tr>
<tr>
<td>Item 2</td>
<td>1.02</td>
<td>.84</td>
</tr>
<tr>
<td>Item 8</td>
<td>1.06</td>
<td>.86</td>
</tr>
<tr>
<td>Item 18</td>
<td>1.11</td>
<td>.84</td>
</tr>
<tr>
<td>Item 26</td>
<td>1.14</td>
<td>.89</td>
</tr>
<tr>
<td>Item 31</td>
<td>1.00</td>
<td>.78</td>
</tr>
<tr>
<td>Item 13</td>
<td>0.66</td>
<td>.34</td>
</tr>
<tr>
<td>Item 19</td>
<td>0.99</td>
<td>.72</td>
</tr>
<tr>
<td>Item 14</td>
<td>1.04</td>
<td>.77</td>
</tr>
<tr>
<td>Item 27</td>
<td>1.01</td>
<td>.73</td>
</tr>
<tr>
<td>Item 33</td>
<td>1.01</td>
<td>.64</td>
</tr>
<tr>
<td>Item 5</td>
<td>0.91</td>
<td>.40</td>
</tr>
<tr>
<td>Item 11</td>
<td>0.98</td>
<td>.61</td>
</tr>
<tr>
<td>Item 15</td>
<td>2.01</td>
<td>.85</td>
</tr>
<tr>
<td>Item 23</td>
<td>1.74</td>
<td>.77</td>
</tr>
<tr>
<td>Item 35</td>
<td>1.00</td>
<td>.47</td>
</tr>
</tbody>
</table>
Global self-esteem is positively associated with Family support domain \((r(370)= .125, p< .01)\), Appearance \((r(370) = .29, p< .001)\), and Academic \((r(370)= .10, p< .05)\), and negatively associated with Others’ approval dimension \((r(370)= .12, p< .05)\).

Further, we tested that are differences on self-worth contingencies between female (group 1) and male (group 2). Results have shown significant differences in two of seven contingencies of self-worth domains: women scored significantly higher than men on Family support domain \((m_1- m_2 = .26, t=2.0, p< .05)\), and significantly lower than men on Approval from others domain \((m_1- m_2 = - .44, t= -2.71, p< .01)\). The effect size is small in both situations.

4. CONCLUSIONS

The obtained results are in concordance with other published studies in different culture (Crocker, Luhtanen, Cooper, & Bouvrette, 2003; Kazarian, 2009; Çetin, Akin, & Eroglu, 2011) which have demonstrated the reliability, validity, and stable multifactor structure of the CSW scale and its subscales. Also, our findings are consistent with those reported by Mariçuţoiu & colegues (2012) in a Romanian student sample. The values of the Cronbach's alpha indices allow us to state that each of the seven subscales have an internal cohesion. The results of this study support the conclusion that Romanian version of CSWS is a valid and reliable instrument. Although remain more difficulties and limitations. One important limitation is concern with the characteristics of the sample used in present study. Another is related to the single item of the scale which has a standardized loading value smaller than .30. The third important limitation refers to convergent and discriminant validity. In the present study, only one self-scale was used for criterion-related validity. All these aspect could justify further studies which aim to investigate the ways of improvement of the CSW-Scale on Romanian population, possible associations between various contingencies of self-worth and other personality variables and the similarity of these measures with the original findings reported by Crocker et al. (2003) on a US student sample.

5. REFERENCES


