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Examining the Factors of Self-Compassion Scale with Canonical Commonality Analysis: Syrian Sample*

Burhanettin OZDEMIR[1] Nesrin SEEF[2]

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ABSTRACT

Purpose of Study: The purpose of this study is to examine the psychological structure of self-compassion and to determine the relationship between the sub-dimensions (or factors) of the self-compassion-scale and the contribution of each factor to the construct. Although the self-compassion scale has been commonly used in the area of psychology, the number of the studies that examine the relationship between the factors (or sub-dimensions) of self-compassion is limited. The contribution of this study is assumed to be substantial since it examines the relationship between the several factors of self-compassion and determines the unique and common contribution of each factor to the self-compassion construct**. Method:** This study employed a relational survey method. A purposive sampling technique was used in order to determine the study group which consisted of 593 university students from Damascus University, Syria. **Findings and Results:** According to canonical correlation analysis *mindfulness* was the most important among the positive factors set, while *over-identified* was the most important among the negative factors set. On the other hand, common variance of *common-humanity* and *self-kindness* was quite large, indicating multicollinearity between these two factors. Additionally, the contribution of *common humanity* was negligibly small; therefore, it can be excluded from the model with a small sacrifice in explained variance. **Conclusions and Recommendations:** Although the results of this study suggest the exclusion the *common-humanity* factor from the self-compassion structure, more research should be conducted to support this finding both theoretically and empirically. Also, additional statistical methods should be used to explore the complex relationship between factors of self-compassion within different samples.

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[1] Corresponding Author: Burhanettin OZDEMIR, Siirt University, Education Faculty, e-mail: b.ozdemir025@gmail.com,
ORCID: http://orcid.org/0000-0001-7716-2700.
[2] Damascus University, SYRIA, e-mail: n-seef@hotmail.com,
ORCID: http://orcid.org/0000-0002-0591-7737.

Introduction

In the 21th century the attention of western psychologists has focused on two concepts, self-compassion and mindfulness. These concepts are considered to be the foundation of different eastern writings. However, Buddhist philosophy and the psychologists differed in defining the concept of self-compassion. Unlike the eastern psychologists, the psychologists in the west looked at it from the aspect of sympathy to others; considering it to be a human feature to understand the suffering of others and the desire to do anything for them in order to reduce the severity of their suffering and pain (Al Asimi, 2014).

Self-compassion suggests alternative solutions to the psychological problems that one can be faced with. Moreover, it helps individuals make self-observations about their feelings and thoughts during an unfortunate situation (Ferreira et al., 2013). It also helps individuals to be aware of the personal problems consciously, rather than turning a blind eye to them. Approaching a problem consciously with a self-compassion phenomena is the most important step in order to solve the problems (Stuart, 2009, 29).

The self-compassion scale, which was developed by Neff (2003b), enables us to be acquainted with ourselves and to evaluate our current psychological state by taking the attributes related to each of the factors of self-compassion into account. These factors are defined as maintaining balance between compassionate and uncompassionate ways so that one can cope with an unwilling situation and fail with either kindness (*self-kindness*) or judgement (self-judgement), consciously consider problems as part of common experience (*common humanity)* or isolation (*isolation*) and dealing with sufferings either through mindful (*mindfulness*) or in an over-identified (*over-identification*) manner (Neff, 2016b). As can be seen, the aforementioned three bipolar-components constitute the self-compassion construct. Thus, one can define the self-compassion construct as a dynamic system based on the interaction between these bipolar components (Neff, Whittaker, & Karl, 2017; Veneziani, Fuochi, & Voci, 2017). In the following section, a brief summary of the six different factors of self-compassion that constitute the Self-Compassion Scale (SCS) is provided.

Self-kindness is a state of understanding the individual for himself/herself in situations exhibiting a lack of self-efficacy or suffering instead of issuing harsh sentences on it (Neff, 2003a). For instance, the individuals who have self-compassion consider themselves imperfect and understand that they may fail to achieve their goals. Therefore, they tend to be kind towards themselves when they face painful experiences, and this is what helps them to deal with negative experiences objectively without any exaggerated emotions (Neff & Vonk, 2009, 23, 50).

Self-judgment is a state of mind in which individuals treat themselves in a harsh manner when they go through difficult circumstances, depending on the degree of hardness (Neff, 2003b).

Common-humanity is a state where the individual sees his/her own experiences as a part of the human experiences instead of separate from other experiences.

Isolation is a state of mind in which an individual has a sense of withdrawn solitude while he or she thinks about his or her mistakes (Neff, 2003a).

Mindfulness means that an individual tries to make his or her feelings balanced when he or she faces uncomfortable emotions.

Over-identification is a state of mind that control an individual's mind and force him or her to think that everything is predicament when he or she feels frustrated (Al Asimi, 2014)

Previously conducted research indicates that self-compassion is positively correlated with self-esteem, life satisfaction, consciousness, independence and optimism, while it is negatively correlated with depression, self-criticism and neurotic perfectionism (Neff, 2003a, 2003b; Neff et al, 2005; Akin, Akin & Abacı, 2007). Likewise, other studies that examine the relationship between self-compassion and psychopathological symptoms indicate that when self-compassion of an individual increases, psychopathological symptoms such as anxiety, depression and stress tend to decrease (MacBeth & Gumley 2012; Muris, 2015).

Other studies indicate that the individuals who have a tendency towards self-compassion are expected to face fewer negative emotions (Leary et al., 2007; Arimitsu & Hofmann 2015; Odou & Brinker, 2014), and their personalities are characterized by flexibility in stressful situations that often cause failure and frustration. Therefore, finding a scale for self-compassion that has a high degree of reliability and consistency is considered to be substantial.

Along with the feasibility of the self-compassion scale (SCS), psychometric properties, validity and usage of total score obtained from the SCS has been widely criticized. However, Neff (2016b) suggested that self-compassion could be used in different structures depending on the objective of the research. Some studies suggest using a two-factor model of self-compassion in which *self-kindness, common humanity,* and *mindfulness* constitute the "self-compassion" factor and *self-judgment, isolation,* and *over-identification* constitute the "self-criticism" factor (Wood et. al., 2010; Van Dam et al., 2012; Lopez et al., 2015). These two sets of factors can be classified as *positive factors* and *negative factors*, respectively. Moreover, some studies claim that the bi-factor model of self-compassion appears to be a more realistic representation of the construct, rather than the higher order model of self-compassion, which basically consists of six factors.

Purpose

The purpose of this study is (1) to examine the criticized psychological structure of self-compassion and (2) to determine the unique and common contributions of each factor to the construct and (3) the degree of relationship between the sub-dimensions (or factors) of the scale as administered to Syrian students. The self-compassion scale consist of six factors that are named *self-kindness, self-judgement, common humanity, isolation, mindfulness* and *over-identified, r*espectively.

Neff (2016b) suggests that the factors of the self-compassion scale can also be classified into two groups, positive factors and negative factors, which roughly represents same structure. Therefore, in this study, factors related to negative characteristics of an individual are classified as *negative factors*, while factors related to positive characteristics of an individual are classified as *positive factors* in order to investigate relationship between the factors of self-compassion and the contribution of each factor to the structure. Therefore, *negative factors* consist of *self-judgement, isolation* and *over identified*, while positive factors consist of *self-kindness, common humanity* and *mindfulness*.

Although the self-compassion scale has been commonly used in the area of psychology, the number of the studies that examine the relationship between the factors (or sub-dimensions) of self-compassion are limited. Contribution of this study is assumed to be substantial, since it not only examines the relationship between the factors of self-compassion, but also determines the unique and common contribution of each factor to the psychological structure of self-compassion. Thus, with the help of this study, the contribution of each negative and positive factor to self-compassion can be examined along with relationship between these factors.

Research Questions

In this study, the relationship between the predictor variable set, which consisted of negative factors related to self-compassion, and the criterion variable set, which consisted of positive factors related to self-compassion, was examined with canonical commonality analysis. The research questions of this study are as follows:

1. What is the relative importance of factors related to self-compassion's psychological structure according to canonical correlation analysis?
2. What are the unique and common effects of negative factors on positive factors associated with self-compassion?
3. How do unique variance associated with each factor and common variance explained by combination of factors differ within predictor and criterion variable sets?
4. Which is the most suitable model that can be constructed to explain relationship between the negative factors (predictor variable set) and positive factors (criterion variable set) related to self-compassion?

Method

Research Design

This study employed a relational survey method since it aimed to examine the psychometric properties of self-compassion and the relationship between the negative and positive factors of the self-compassion scale by the means of canonical correlation and commonality analysis. The relational survey method is suggested, when the ultimate goal of study is to determine the degree of interaction and relationship among multiple variables (Cohen, Manion, & Morrison, 2000; Karasar, 2006).

Research Sample

This study was carried out during the 2015–2016 academic year at Damascus University. The research sample consisted of 593 literature and science students in their first and fourth years in the education faculty. Table 1 shows the distribution of individuals in the research group with respect to gender, college and the year that they are studying.

Table 1

Distribution of the Research Group with Respect to Gender, College and Year

Year	Gender		College	
	Male	Female	Science	Literature
First year	162 (27.31%)	143 (24.11%)	158 (26.64%)	144 (24.28%)
Fourth year	160 (26.98%)	128 (21.58%)	134 (22.59%)	157 (26.74%)
Total	322	271	292	301

Table 1 shows that the self-compassion scale was administered to 271(43%) female students and 322 (57%) male students. Additionally, the study group consisted of 292 students studying science education and 301 literature education.

Research Instruments and Procedures

The self-compassion scale is a commonly used psychological test developed by Neff (2003b). The original form of the self-compassion scale is a likert scale and consist of 26 items that has five different alternatives ranging from almost never (1) to almost always (5). Moreover, Raes, Pommier, Neff and Gucht (2011) developed the short form of the self-compassion scale that consists of twelve items with six factors relevant to the original form. Raes and his colleagues showed that the short form has an almost identical factorial structure as compared to original form with 26 items and the internal consistency coefficient of the short form was substantially high.

Validity and Reliability

The short form of the self-compassion scale was first adapted to Arabic by Alabrsh (2015), and the Arabic version of the self-compassion scale was used to collect data from Damascus University. Confirmatory factor analysis results indicated that the Arabic version of the short form had the same factorial structure of original form. Additionally, Cronbach's alpha reliability coefficient and split-half reliability coefficient were equal to 0.87 and 0.83, respectively. Moreover, test-retest reliability coefficients of each factor ranged between 0.86 and 0.94. On the other hand, the corrected item-total correlation differed in the range of 0.54 and 0.75. As a result, the

Arabic version of self-compassion scale appears to be a valid and reliable psychological test.

Data Analysis

The relationship between the negative and positive factor groups were examined by Canonical Correlation and Canonical Commonality Analysis. Canonical Commonality Analysis enables us to determine the degree of commonality between the factors and the contribution of each factor to the measured psychological structure by the means of calculating unique and common variance associated with each factor. Therefore, it enables researchers to interpret the results in a more accurate and reliable way. The "yhat" R package, developed by Nimon, Oswald and Roberts (2015) defined in R statistical software, was used to run canonical correlation and canonical commonality analyses.

The z-scores of each variable was calculated in order to determine single outliers for each factor. According to the results, there appears to be no single outliers within the variable sets since all z-scores differed in a range of ±3.29. On the other hand, Mahalanobis distance was calculated in order to examine the multiple outliers. Mahalanobis distances differed in the range of 1.11 and 22.92. As a results, eighteen individuals with Mahalanobis distance scores higher than 12.59 ($X^2_{sd=6}$ = 12.59) were excluded from the research group. Finally, the study carried out with 575 participants.

Results

First of all, canonical correlation analysis (CCA) was conducted to investigate the relationship between the factors of the self-compassion scale that constituted both criterion and predictor variables (negative factors and positive factors), respectively. Conducting CCA enables researchers to select canonical variable pairs that represents both predictor and criterion variable sets by the means of canonical functions. CCA does not provide detailed information about the relationship between the factors and interpreting the results of CCA is more complex than that of other statistical methods. That is why, after conducting CCA, commonality analysis was conducted in order to get more detailed information about the factorial structure of the self-compassion scale and the relationship between the negative and positive factors. One can easily determine the unique and common variance associated with each factor and the degree of multicollinearity between factors and construct the best model given the predictor and criterion variable sets with the help of commonality analysis.

Table 2 presents the correlation coefficients between the factors of the self-compassion scale, which is the simplest way to examine the relationship between the variables and the existence of multicollinearity between variables. Tabachnick and Fidell (2007) states that an observed correlation higher than 0.90 is an indicator of multicollinearity.

Table 2

Correlation Coefficients Related to Factors of self-compassion

	Self-kindness	Self-judgement	Common Humanity	Isolation	Mind-fulness	Over identified
Self-kindness	1.00					
Self-judgement	0.59	1.00				
Common Humanity	0.61	0.44	1.00			
Isolation	0.55	0.55	0.44	1.00		
Mind-fulness	0.60	0.63	0.45	0.67	1.00	
Over identified	0.70	0.60	0.51	0.49	0.62	1.00

According to the correlation coefficients shown in Table 2, self-kindness and over-identified yielded the highest correlation coefficient, while both common-humanity-self-judgement and common-humanity–isolation factors yielded the smallest correlation coefficients. The other correlation coefficients ranged between 0.44 and 0.70, which indicates that the correlation between the factors was slight to moderate and there appeared to be no multicollinearity between both negative and positive factors.

In this study, both predictor (negative factors) and criterion variable sets (positive factors) consist of three factors. Therefore, only three canonical functions and three canonical variable pairs, that represent predictor and criterion variable sets, can be calculated. Table 3 displays significance test results related to each canonical variable set and canonical correlations (R_c) explained variance (R_c^2), which is equal to the square of R_c.

Table 3

Canonical Correlation and explained variance (R_c)

	R_c	R_c^2	Sig (p)
The first canonical function (R_{c1})	0.847	0.717	0.00
The second canonical function (R_{c2})	0.219	0,047	0.00
The third canonical function (R_{c3})	0.017	0,001	0.67

According to the results shown in Table 3, the first canonical correlation (R_{c1}) of the first canonical variable set was equal to 0.847; the explained variance related to the first canonical variable set was equal to 71.7% (R_{c1}^2). Although the second canonical function was statistically significant, the explained variance of the second canonical

function was equal to 4.7% (R_{c2}^2), which was considered to be substantially small (less than 10 %) and therefore should not be interpreted (Capraro & Capraro, 2001). As a result, self-compassion factors that constituted both predictor and criterion variable sets explained 71.8 % of variance in self-compassion psychological structure.

Table 4 displays standardized canonical coefficient and canonical loadings related to each factor within both positive and negative factor sets of self-compassion. These two statistics provide information about the relative importance of each factor in the model and the existence of multicollinearity between the factors. However, these statistics do not provide information about the degree of multicollinearity between factors.

Table 4

Standardized Canonical Coefficients and Canonical Loadings

Variable set	Factors	Standardized canonical coefficients	Canonical loadings
Positive factors	Self-kindness	0.460	0.879
	Common humanity	0.129	0.668
	Mindfulness	0.565	0.900
Negative factors	Self-judgement	0.273	0.805
	Isolation	0.419	0.812
	Over identified	0.504	0.871

The standardized canonical coefficients in Table 4 indicate that the most important positive factor was mindfulness (0.565), which was followed by self-kindness (0.460) and common humanity (0.129). On the other hand, the most important negative factor was over identified (0.565), which was followed by isolation (0.460) and self-judgement (0.129).

The square of canonical loadings gives the explained variance by a factor in a canonical variable set. According to Table 4, the self-judgement factor explained 64.8% (0.805^2) of the variance in positive factors set, while isolation and over-identified explained the 65.9% (-0.812^2) and 75.8% (0.871^2) of variance in positive factors set. The sum of the explained variance of factors was larger than 100%, which indicates the existence of multicollinearity between negative factors. Likewise, the self-kindness factor explained 77.2% (0.879^2) of the variance in the negative factors set, while the common-humanity and mindfulness factors explained the 44.6% (-0.668^2) and 81% (0.9^2) of variance in negative factors set. Similar to negative factors, the sum of explained variance percentages associated with positive factors exceeded 100%, which was an indicator of multicollinearity.

Commonality analysis results

One can only interpret canonical correlation coefficients and canonical loadings related to each variable set when canonical correlation analysis is favored. Therefore, this statistical method provides limited information about the complex relationships between the variables. İn this study, commonality analysis was applied to canonical variables that represent negative and positive factors associated with self-compassion. The results of commonality analysis were presented in Table 5, Table 6 and Table 7.

Table 5 depicts the unique and common variance coefficients associated with the positive factors of self-compassion. Total variance presented in Table 5 corresponds to the total explained variance of positive factors in the self-compassion model.

Table 5

Variance components associated with the positive factors set

	Factors	Commonality coefficients	Percentage (% R^2)
Unique variance	Self-kindness	0.075	10.46
	Common humanity	0.007	1.02
	Mindfulness	0.144	20.01
Common variance	Self-kindness and Common humanity	0.053	7.44
	Self-kindness and Mindfulness	0.179	24.89
	Common humanity and Mindfulness	0.012	1.64
	Self-kindness, Common humanity and Mindfulness	0.248	34.55
	Total	0.718	100.00

The unique effect of each factor representing the variance is only explained by the factor itself, while common variance represent the variance explained by the combination of different factors. Additionally, the proportion of each unique and common variance to the total variance as explained by models (%R^2) were given in Table 5 in order to see contribution of each factor to the model.

Negative commonality coefficients are indicative of suppressor variables that obscure the interpretation of results and affect other variables in a negative way (Pedhazur, 1997). One can clearly see that all commonality coefficients in Table 5 related to positive factors are positive, which indicates that there is no suppressor factor in the positive factors set. Moreover, according to the results shown in Table 5, the common variance associated with self-kindness, common humanity and mindfulness had the largest percentage (34.55%), and it was followed by the common variance related to self-kindness and mindfulness (24.89%) and unique variance

related to self-kindness (20.01%). When only unique effects were taken into account, the mindfulness factor made the largest contribution to the model, while common humanity made a somewhat small contribution when compared to the other factors.

Table 6 presents the unique and common variance coefficients associated with the negative factors of self-compassion. The total variance presented in Table 6 corresponds to the total explained variance of negative factors in the self-compassion model.

Table 6

Variance components associated with the negative factors set

	Factors	Common effects (R^2)	Percentage (% R^2)
Unique variance	Self-judgement	0.030	4.12
	İsolation	0.083	11.61
	Over-identified	0.110	15.34
Common variance	Self-judgement and isolation	0.059	8.26
	Self-judgement and over- identified	0.104	14.50
	Isolation and over-identified	0.059	8.12
	Self-judgement, isolation and over-identified	0.273	38.06
	Total	0.718	100.00

Similar to the results shown in Table 5, all commonality coefficients in Table 6 related to negative factors are positive, which indicates that there is no suppressor factor in the negative factors set either. When it comes to commonality coefficients, the common variance associated with self-judgement, isolation and over-identified factors had the largest percentage (38.6%), which was followed by unique variance related to over-identified (15.34 %) and common variance related to self-judgement and over-identified (14.50%). When only unique effects were taken into account, the over-identified factor made the largest contribution to the model among the negative factors.

Commonality analysis also provides R^2 values (explained variance) related to all possible sub-models that can be constructed with both positive and negative factors of self-compassion. One can easily decide on the best model and the most informative factors that predict the self-compassion psychological structure.

Table 7 present R^2 values of all possible sub-models that can be constructed with the factors within the positive and negative factors set so as to predict canonical variable pairs representing the negative and positive self-compassion factors.

Table 7

R^2 values related to all possible sub-models of self-compassion factors

Positive factors		Negative factors	
Factors	R^2	Factors	R^2
Self-kindness	0.55	Self-judgement	0.466
Common humanity	0.319	Isolation	0.475
Mindfulness	0.584	Over-identified	0.545
Self-kindness and common-humanity	0.572	Self-judgement and isolation	0.608
Self-kindness and mindfulness	0.710	Self-judgement and over-identified	0.634
Common humanity and mindfulness	0.644	Isolation and over-identified	0.688
Self-kindness, common humanity and mindfulness	0.718	*Self-judgement, isolation and over identified*	0.718

According to the results shown in Table 7, the mindfulness factor alone explained 58.4 % (R^2=0.584) of the variance of model which could be considered quite large. When the positive factors set consisted of mindfulness and self-kindness explaining the variance related to this model increased to 71%, it was substantially close to the explained variance of the model, including all three positive factors (for K=3, R^2=0.718). Moreover, there appeared to be a substantially small reduction in the explained variance (0.718–0.710=0.008), when the common-humanity factor was excluded from the positive factors set. This result implies that *common-humanity* did not make a significant contribution to the prediction of positive factors of self-compassion and had multicollinearity with other factors since most of its variance was explained by other factors. Therefore, the *common-humanity* factor should be excluded from the positive factors set.

When it comes to R^2 values of sub-models constructed with negative factors, the over-identified factor itself explained 54.5% (R^2=0.545) of the variance of the model, which could be considered quite large when compared to other factors. However, all three of the negative factors made an almost similar contribution to the model. Therefore, the best model that could be constructed with negative factors to predict the first canonical variable pair seems to be the model including all three negative factors.

Discussion and Conclusion

This study examined the relationship between the sub-dimensions (or factors) of the self-compassion scale short form and the criticized psychological structure of self-compassion that was administered to Syrian students. For these purposes, the

relationship between the "negative factors set", consisting of *self-judgement, isolation* and *over-identified*, and the "positive factors set", consisting of *self-kindness, common humanity* and *mindfulness*, were examined with canonical correlation and commonality analysis.

The results of the canonical correlation analysis, which provide information about the relative importance of each factor, indicate that *mindfulness* was the most important factor in the positive factor set, and it was followed by the *self-kindness* and *common-humanity* factors, respectively. On the other hand, *over-identified* was the most important factor in the negative factors set, and it was followed by the *isolation* and *self-judgement* factors, respectively. Additionally, the positive and negative factors explained 71.8% (R^2=0,718) of the variance in the self-compassion psychological structure.

Commonality analysis helps researchers determine the unique and common contributions of each factor to the model by partitioning the explained variance into its constituents. It also aids in determining the degree of multicollinearity between factors sets. According to the commonality analysis results, the unique variance associated with the *common-humanity* factor was substantially smaller as compared to the other factors in the positive factors set (R^2=0.007). On the other hand, the common variance of *common-humanity* and *self-kindness* was relatively large, which means that most of the variance of the common-humanity factor was explained by the *self-kindness factor* indicating the degree of multicollinearity between these two factors. Moreover, all possible sub-model results indicate that the total variance explained by positive factors decreased to 71% when the *common-humanity* factor was excluded from the model. These results suggest that the *common-humanity* factor can be excluded from the model with a small sacrifice in the explained variance.

In this study, the interpretation of total scores obtained from the self-compassion scale was avoided since the factorial structure of self-compassion was considered to not be a realistic representation of the construct. There are still ambiguities about which factorial structure is the best representation of self-compassion. Garcia-Campayo and her colleagues (2014) suggested the use of the original form of the self-compassion scale with a higher-order factorial model. They provided evidence about the relevance of this model, while some other studies examining the factorial structure of self-compassion found that the higher-order model with its six factor was not a valid representation of the construct (Hupfeld & Ruffieux, 2011; Petrocchi et al., 2013; Lopez et al., 2015). They also suggested that one should avoid reporting the total score obtained from the SCS as an indication of the self-compassion score of an individual. Likewise, the original six-dimensional structure of the self-compassion scale was confirmed by several studies (e.g. Lee & Lee, 2010; Azizi et al., 2013; Castilho, Pinto-Gouveia, & Duarte, 2015), while some studies also suggested presenting the construct with higher-order models (Chen et al., 2011; Castilho et al., 2015). However, some other studies (e.g. Costa et al., 2016; Petrocchi et al., 2013; Muris, Otgaar, & Petrocchi, 2016; Muris & Petrocchi, 2017; Neff, 2016a) did not confirm the higher-order model claiming, that the interpretation of scale scores was confounded in the presence of the higher-order model (Veneziani et. al., 2017).

In this study, the relationship between the factors of self-compassion was examined via canonical correlation and commonality analysis methods. Additionally, the factors were classified into two sets, positive and negative factors. The ultimate goal of this study was to examine the common and unique contribution of each of the factors and the interaction between these factors. Other statistical methods are suggested to uncover the complex relationships between the factors of self-compassion. Although the results of this study suggest the exclusion of the *common-humanity* factor from the self-compassion structure, more research should be conducted to support this finding both theoretically and empirically.

There are still ongoing discussions about which factorial model best fits the factorial structure of self-compassion. Some studies suggest a higher-order model with six factors, while some other studies suggest a two-factor structure consisting of positive factors ("self-compassion") and negative factors ("self-criticism") and a bifactor model consisting of six factors along with a general factor. Although there appeared to be alternative models, most of the researchers are in favor of using the bifactor model (Hupfeld & Ruffieux, 2011; Lopez et. al., 2015, Muris, 2015; Neff et al., 2017). To conclude, more studies that aim to examine the factorial structure of self-compassion with different models should be conducted within different populations other than university students.

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Öz-duyarlık Ölçeğinin Alt Boyutlarının Kanonik Ortak Etki Analizi İle İncelenmesi: Suriye Örneklemi

Atıf:

Ozdemir, B., & Seef, N. (2017). Examining the factors of self-compassion scale with canonical commonality analysis: Syrian Sample. *Eurasian Journal of Educational Research*, 70, 19-36, DOI: http://dx.doi.org/10.14689/ejer.2017.70.2

Özet

Problem Durumu: Öz-duyarlık, bireyin kendine karşı iyimser davranması, karşılaştıkları sorunları kabullenmesi, rahatsız edici durumlarla karşılaştığında kendine daha sevecen davranması, başarısız ve yetersiz olduğu durumlarda bilinçli davranması ve karşılaşılan sorunların insan hayatının bir gereği olduğunu kabullenmesi olarak tanımlanabilir (Neff, 2003a; Akın, Akın ve Abacı, 2007). Öz-duyarlık bireylerin karşılaştıkları sorunların çözümünde alternatif bir yaklaşım önermektedir. Böylece, bireyin bir durum karşısında duyguları ve düşünceleri hakkında iç gözlem yapmasına olanak sağlar (Ferreira et al., 2013). Ayrıca, bireyi rahatsız eden kişisel sorunlardan kaçmak yerine bu sorunun bilinçli bir şekilde farkında olmasını sağlar. Öz-duyarlık olgusu ile sorunlara bilinçli bir şekilde yaklaşmak ise sorunun çözümü için atılacak en önemli adımdır (Stuart, 2009, s. 29). Araştırmalar öz-duyarlığın kendini kabul, yaşam doyumu, bilinçlilik, özerklik, mutluluk ve iyimserlik gibi birçok kavramla pozitif ilişkili olduğunu kanıtlamıştır. Aynı zamanda öz-duyarlık depresyon, öz-eleştiri, düşünce baskısı ve nörotik

mükemmeliyetçilikle negatif ilişkili bulunmuştur (Neff, 2003a, 2003b; Neff ve diğerleri, 2005; Akın, Akın ve Abacı, 2007). Neff (2003b) tarafından geliştirilen Öz-duyarlık Ölçeği bireyin kendisini tanımasına olanak sağlayan ve öz-duyarlığın alt boyutlarıyla ilişkili özellikleri göz önünde bulundurarak bireyin psikolojik durumunun değerlendirilmesine olanak sağlayan bir ölçme aracıdır.

Araştırmanın Amacı ve Önemi: Bu çalışmanın amacı, Suriyeli üniversite öğrencilerine uygulanan öz-duyarlık ölçeğinin alt boyutları arasındaki ilişkinin ve her bir faktörün öz-duyarlık psikolojik yapısına olan özgün ve ortak etkisinin kanonik ortak etki analizi ile incelenmesidir. Öz-duyarlık ölçeği formu 6 alt boyuttan oluşmaktadır. Öz-duyarlık ölçeği özellikle psikoloji alanında sıklıkla kullanılmasına karşın ölçeğin alt faktörlerinin birbiri ile ilişkisini inceleyen araştırma sayısı sınırlıdır. Bu araştırma bireylere uygulanan öz-duyarlık ölçeğinin alt faktörlerinin bir biri ile ilişkisini ve her bir faktörün öz-duyarlığa yapmış olduğu özgün ve ortak etkisini incelemeye olanak sağladığından önemli görülmektedir. Kanonik ortak-etki analizi her bir değişken kümesindeki değişkenlere ait özgün ve ortak varyanslarını hesaplayarak değişkenler arasındaki çoklu bağlantının derecesini, her bir değişkenin analize olan katkısını hesaplamaya olanak sağlar. Böylece araştırmacının daha doğru ve güvenilir yorumlar yapmasına yardımcı olur.

Araştırmanın Yöntemi: Bu çalışmada yordayıcı değişken kümesinde yer alan öz-duyarlıkla ilişkili olumsuz faktörler ile ölçüt değişken kümesini oluşturan öz-duyarlıkla ilişkili olumlu faktörler arasındaki ilişkinin incelenmesi amaçlandığından bu araştırmada ilişkisel tarama modeli kullanılmıştır. Birden fazla değişken arasındaki ilişkinin ve etkileşimin derecesini belirlendiği çalışmalarda ilişkisel tarama yönteminin kullanılması önerilmektedir (Cohen, Manion & Morrison, 2000; Karasar, 2006). Bu araştırma 2015-2016 eğitim ve öğretim yılında Şam Üniversitesi Eğitim Fakültesi'nin çeşitli bölümlerinde öğrenim gören 593 üniversite öğrencisi üzerinde yürütülmüştür. Öğrencilerin 271'si (% 43) erkek ve 332'si (% 57) kız öğrenciden oluşmaktadır. Değişkenlerde tek yönlü uç değerlerin olup olmadığı incelemek için her bir değişkene ait z puanları hesaplanmıştır. ±3.29 aralığının dışında kalan z puanının olmadığı bulunmuştur. Çok yönlü uç değerler ise Mahalanobis uzaklıkları hesaplanarak incelenmiştir. Elde edilen Mahalanobis değerlerinin minimum değeri 1.11 iken maksimum değeri 22.92'dir. Mahallonobis değeri 12.59'dan ($X^2_{sd=6}$ = 12.59) yüksek olan 18 bireye ait veri analizden çıkartılmıştır. Veri temizleme aşmasından sonra analizler 575 birey üzerinde sürdürülmüştür. Öz-duyarlık ölçeği ilk olarak Neff (2003b) tarafından geliştirilmiştir. Ölçeğin orijinal formu (1) hiçbir zaman (2) nadiren (3) sık sık (4) genellikle ve (5) her zaman şeklinde 5'li likert tipi bir derecelendirmeye sahip 26 maddeden oluşmaktadır. Raes, Pommier, Neff ve Gucht (2011) ise yapmış olduğu çalışma sonucunda 12 maddeden oluşan öz-duyarlık ölçeğinin kısa formunu geliştirmişler ve ölçeğin kısa formunun orijinal ölçekle aynı faktör sayısına sahip olduğunu ve iç tutarlık katsayılarını yüksek olduğu belirtilmiştir. Öz-duyarlık ölçeği 6 boyuttan oluşmaktadır. Bu boyutlar: *Özsevecenliğe* (selfkindness) karşı *öz-yargılama (self-judgement)*, p*aylaşımların bilincinde olmaya (common humanity)* karşı *yabancılaşma (isolation)* ve *bilinçliliğe (mindfulness)* karşı *aşırı-özdeşleşme (over identified)* boyutlarıdır.

Bu çalışmada kullanılan öz-duyarlık ölçeği kısa formu ise Alabrsh (2015) tarafından Arapçaya uyarlanmıştır. Yapılan doğrulayıcı faktör analizinde ölçeğin orijinal formla uyumlu olduğu görülmüştür. Ölçeğin iç tutarlılık katsayısı 0,86 ve test-tekrar test güvenirlik katsayılarının (0,86 – 0,94) aralığında ve iki yarı güvenirliğinin ise 0,83 olarak hesaplanmıştır. Ayrıca ölçeğin düzeltilmiş madde-toplam korelasyonlarının 0,54 ile 0,75 arasında sıralandığı bulunmuştur. Bu sonuçlar doğrultusunda ölçeğin geçerli ve güvenilir bir ölçme aracı olduğu söylenebilir. Özduyarlık yapısının alt faktörleri arasındaki ilişkiyi incelemek amacıyla, öz duyarlık ile ilişkili olumsuz ifadeler içeren faktörler negatif faktörler olarak, öz duyarlık ile ilişkili olumlu ifadeler içeren faktörler ise pozitif faktörler olarak sınıflandırılmıştır. Negatif faktörler *öz-yargılama, yabancılaşma* ve *aşırı-özdeşleşme* alt faktörlerinden oluşurken; pozitif faktörler ise, *özsevecenlik, paylaşımların bilincinde olma* ve *bilinçlilik* alt faktörlerinden oluşmaktadır. Değişken kümeleri arasındaki ilişki ise kanonik korelasyon ve kanonik ortak etki analizi ile incelenmiştir.

Araştırmanın Bulguları: Kanonik korelasyon analizi bulgularına göre, öz-duyarlık yapısı ile ilişkili pozitif faktörler kümesindeki en önemli faktörün *bilinçlilik* olduğu ve bunu sırasıyla *öz-sevecenlik* ve *paylaşımların bilincinde olma* faktörleri takip etmektedir. Benzer şekilde negatif faktörler kümesindeki en önemli faktörün *aşırı-özdeşleşme* olduğu ve bunu sırasıyla *yabancılaşma* ve *öz-yargılama* faktörleri takip etmektedir.Yordayıcı ve ölçüt değişken kümelerinde yer alan öz-duyarlık ölçeğine ilişkin faktörlerin öz-duyarlık yapısına ait varyansın %71,8'sini açıkladığı bulunmuştur (R^2=0,718). Ayrıca ortak etki analizi bulgularına göre, pozitif faktörler kümesinde yer alan *paylaşımların bilincinde olma* faktörüne ait özgün ve ortak varyans değerlerine bakıldığında, değişkene ait özgün varyans değerinin oldukça düşük (R^2=0,007) iken *öz-sevecenlik* ve *bilinçlilik* faktörleri ile açıkladığı varyans değerlerinin ise yüksek olduğu (R^2=0,248) görülmektedir. Ayrıca paylaşımların bilincinde olma faktörü modelden çıkartıldığında, açıklanan varyans oranı ise % 71 olmaktadır.

Araştırmanın Sonuçları ve Önerileri: Araştırmanın bulguları göz önünde bulundurulduğunda *paylaşımların bilincinde olma* faktörü ile öz-*sevecenlik* ve *bilinçlilik* faktörleri arasında çoklu bağlantı olduğu ve bu faktöre ait özgün varyans değerinin düşük olmasından dolayı bu faktörün modelden çıkartılması önerilmektedir. Bu durumda öz-duyarlık ölçeğinin pozitif faktörler kümesinde yer alan faktör sayısı 2'ye inecektir. Ancak, *paylaşımların bilincinde olma* faktörünün öz-duyarlık psikolojik yapısından çıkartılmasının öz-duyarlık ölçeğinin teorik yapısına etkisinin ve ölçekten elde edilen puanların yorumlamasına olan etkisinin incelenmesi gerekmektedir. Bu bağlamda, farklı örneklemlerde ve farklı istatistiksel yöntemler kullanılarak ölçeğin faktörleri arasındaki ilişkinin incelenmesi önerilmektedir. Ayrıca, ölçme değişmezliği yöntemleri (measurement invariance methods) kullanılarak farklı alt gruplarda ve kültürlerde ölçeğin psikolojik yapısının incelenmesi önerilmektedir.
Anahtar Kelimeler: Öz-duyarlık ölçeği, kanonik ortak-etki analizi, psikolojik testler.