

PSYCHOMETRIC PROPERTIES OF ADAPTATION OF THE OXFORD UTILITARIANISM SCALE TO TURKISH

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Abstract

Studies concerning utilitarian judgements have generally relied on sacrificial moral dilemmas. In their study, Kahane et al. (2017) made distinction between utilitarian judgements and developed a new scale to measure two dimensions of utilitarianism namely impartial beneficence and instrumental harm. This study aims to extensively examine the psychometric properties of adapted version of the Oxford Utilitarianism Scale in Turkish sample (n=290). Concerning the reliability of the scale, internal consistency and item-total correlation coefficients are found to be satisfactory. Consistent with the original scale two factor model was supported (2 factor solution was explained 54.24% of total variance) and confirmatory factor analysis revealed an adequate fit. As for the validity studies, convergent validity of the scale is supported revealing the association of OUS total, impartial beneficence and instrumental harm with conceptually related measures, which included sub-clinical psychopathy, empathy and perspective taking. The theoretical and practical implications of this study are discussed.

Keywords: Oxford Utilitarianism Scale, utilitarian judgements, personality, convergent validity, confirmatory factor analysis

OXFORD FAYDACILIK ÖLÇEĞİ'NİN TÜRK KÜLTÜRÜNE UYARLAMA ÇALIŞMASININ PSİKOMETRİK ÖZELLİKLERİ

Öz

Faydacı yargılara ilişkin çalışmalar genellikle ahlaki ikilemlere dayanmaktadır. Ancak Kahane ve ark. (2017) çalışmalarında faydacı yargılar arasında ayırım yapmıştır ve faydacılığın iki boyutunu ölçmek için yeni bir ölçek geliştirmiştir. Bu iki boyut, tarafsız yarar ve araçsal zarar olarak isimlendirilmiştir. Bu çalışma, Oxford Faydacılık Ölçeği'nin (OFÖ) uyarlanmış versiyonunun Türkiye örneklemindeki psikometrik özelliklerini kapsamlı bir şekilde incelemeyi amaçlamaktadır (n = 290). Ölçeğin

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güvenirliliği ile ilgili olarak iç tutarlılık ve madde-toplam korelasyon katsayıları yeterli bulunmuştur. Orijinal ölçeğe uygun olarak iki faktör modeli desteklenmiş (2 faktörlü model varyansı %54.24 düzeyinde açıklamıştır) ve doğrulayıcı faktör analizi yeterli bir uyum sağlamıştır. Geçerlilik çalışmaları için, ölçeğin yakınsak geçerliliği, subklinik psikopati, empati ve perspektif alma dahil olmak üzere, OFÖ toplam puanı tarafsız yarar ve araçsal zarar ile anlamlı düzeyde ilişkili bulunmuştur. Bu çalışmanın teorik ve pratik etkileri tartışılmıştır.

Anahtar Sözcükler: Oxford Faydacılık Ölçeği, faydacı muhakemeler, kişilik, yakınsak geçerlilik, doğrulayıcı faktör analizi.

Introduction

Utilitarianism comes from the Latin word “utility”. In moral philosophy, utilitarianism is seen as a principle that associates the truth of action with the happiness of the majority (Cevizci, 2012, p. 455). According to Bentham, utilitarianism is expressed as a feature in the object to bring feelings of joy, goodness, or preventing harm, pain or grief. At this point, if the group is meant to be a society, the good and happiness of the society and the good and happiness of the individual should be aimed in our actions. Similar to John Stuart Mill, he targets happiness, associating it with the absence of pain and suffering. In this context, philosophers who advocate the view of utilitarianism advocated the principle of the greatest happiness of the greatest number of people (Beauchamp, 2016).

In the studies on utilitarianism, it is seen that the action is evaluated in two ways. For example, the answers given to questions such as the harm of a single person to save the lives of many people cause us to classify the form of reasoning in the form of a deontological or utilitarian view. According to the beneficiary principle, the decision of individuals about the event should take care of the happiness of many people. Researchers are argued that it is important that the quality, correctness, or inaccuracy of the deontology principle rather than the result of the action is important for the fulfillment of some tasks (Bartels and Pizarro, 2011). In summary, even if a large number of people will be saved as a result of the action, the act itself is considered morally inaccurate, as the act itself is to harm an innocent human being. People, in some cases, act in accordance with the principle of deontology, while prioritizing the nature of the action, in some cases it decides on the outcome of action and the principle of utilitarianism that points to the happiness of many people.

Utilitarianism is one of the moral problems that philosophy deals with. However, in recent years, studies in the field of psychology treats utilitarianism as a form of decision

making and some kind of moral reasoning. In the literature, the most known dilemma in the studies about the decision making of moral dilemmas is the trolley dilemma used in the study by Foot (1967). While there are several variations of the dilemma in question, the decision-maker can either push an innocent person to the front of the train, save 5 people approaching the train, or change the direction of the train and lead the train to the place where there is only one person and saves 5 people (as cited in Kahane, Everett, Earp, Farias & Savulescu, 2015). In the studies conducted using other dilemmas similar to these dilemmas, brain activities, personality traits and psychological mechanisms underlying these decisions are examined. Decisions are basically classified as deontological or utilitarian.

In their study Greene et al. (2008) explained the mechanism that is effective in making utilitarian and deontological decisions as the dual processing model. Accordingly, utilitarian decisions require a longer period of reasoning, while deontological judgments are more intuitive, emotional, and faster. Similarly, in a study by Conway and Gawronski (2013), it was found that cognitive intensity influenced the decision making by individuals to influence decision making. The manipulation of the sense of empathy has also been shown to contribute positively to deontological decisions. In the same study, features such as taking perspective and empathy were associated with deontological decisions.

In a number of similar studies, it seems that utilitarian decision-making for dilemmas is associated with psychopathy, aggression and antisocial tendencies (Bartels & Pizarro, 2011; Kahane, Everett, Earp, Farias & Savulescu, 2015; Nichols & Mallon, 2006). In the view of utilitarian ethics, the happiness of the majority is targeted. However, in studies conducted, the utilitarian decision making has been associated with psychopathy. For this reason, it is considered that it is necessary to evaluate the utilitarianism in two dimensions.

The happiness of the majority may sometimes require damage to a person in order to save more people. Kahane et al. (2017) describe this element of utilitarianism as “instrumental harm”. The other element of utilitarianism is based on the happiness of the majority but the majority here serves the common good and the good of all, rather than our own preferences or interests. Bentham (1789) explained this situation as targeting the happiness of each person living on the planet (as cited in Demir, 2004). In this case this element of utilitarianism as “universal or impartial beneficence” (Kahane et al., 2017). To donate some of your income to the charities is an example of impartial beneficence.

It is observed that the studies are mainly related to the instrumental harm dimension of utilitarianism (Bartels & Pizarro, 2011; Kahane, Everett, Earp, Farias & Savulescu, 2015).

Individuals with personality traits such as aggression or psychopathy in the responses to the dilemmas used in these studies may make decisions that prefer to harm others. However, it is difficult to say that the same individuals will participate in altruistic actions in which they are observing the happiness of the majority, as expressed in the universal beneficence. With this aim, it is thought that the two-dimensional utilitarian scale namely Oxford Utilitarianism Scale (OUS) developed by Kahane et al. (2017) will extend the scope of studies related to utilitarianism, which has already been reduced to a single dimension in the literature by considering these impartial beneficence and instrumental harm dimensions separately. In this context, in this study, it is aimed to investigate the psychometric properties of the Oxford Utilitarianism Scale in Turkish culture using samples of university students.

Utilitarianism was related with psychopathy, empathic concern and hypothetical donation (Kahane et al., 2015; Kahane et al., 2017; Koeings, Kruepke, Zeier & Newman, 2012). In this study subclinical psychopathy, empathy, perspective taking and hypothetical donation measures were used for to determine convergent validity.

Oxford Utilitarianism Scale (OUS) has two dimensions. Instrumental harm dimension consists of 5 items and impartial beneficence dimension consist of 4 items. OUS questionnaire include 7 point scale ranging from strongly disagree (1) to strongly agree (7). The scale doesn't include reverse scored items. The highest and the lowest scores to be respectively obtained from the scale are as follows: OUS total (9-63), instrumental harm (5-35), impartial beneficence (4-28). In their study Kahane et al. (2017) found that two factors separately showed excellent model fit. For impartial beneficence $\chi^2=3.56$ $p=.16$, CFI=.99, RMSEA =.053, SRMR=.022, AIC=4027.46, BIC=4056.59. For instrumental harm $\chi^2=3.75$ $p=.59$, CFI=.1.00, RMSEA =.00, SRMR=.021, AIC=5281.13, BIC=5317.54. So two factor solution showed better model fit.

Thus, this study includes three phases. First, factor structure of the scale is examined by exploratory factor analysis and confirmatory factor analysis applied for two factor solution. Then internal consistency and item total-correlation for construct validity. As for the convergent validity, the correlation of OUS total, impartial beneficence and instrumental harm with other measures assessing conceptually related constructs (e.g., psychopathy, empathy, perspective taking, donation to charity).

Method

Participants

As stated, the reliability and validity coefficients of the OUS were examined in a sample of university students. 290 participants consist of 49 males (16.9%) and 241 females (83.1%) ($M = 21.24$, $SD = 3.49$). The participants were studying Humanities and Social Sciences Faculty.

Measures

In addition to the Demographic Information Form, four measures were employed in the study.

Dark Triad “psychopathy” measure.

This scale consisting of 27 items was developed by Jones and Paulhus (2014). There are three sub-dimensions which measure the personality traits of machiavellism, narcissism and subclinical psychopathy and it is 5-likert type. In the reliability study conducted by Jones and Paulhus (2014), cronbach alpha was found as .79 for subclinical psychopathy. In this study, 9 items subclinical psychopathy subscale was used. The adaptation of the scale to the Turkish culture was done by Özsoy, Rauthmann, Jonason and Ardiç (2017) and the cronbach alpha value was found as .79. In this study, cronbach alpha reliability coefficient was found to be .76 for psychopathy.

Interpersonal Reactivity (empathy and perspective taking).

This scale was developed by Davis (1983) in order to measure individuals' empathy and the ability to take the point of view of others. Total number of items is 28, 5 of the Likert-type scale, there are 4 subscales. In this study, sub scales including perspective taking and empathy were used. In the study conducted by Kumru, Carlo and Edwards (2004) cronbach alpha was found as .59 and .60. In this study, cronbach alpha reliability coefficient was found to be .61 for empathy and .76 for perspective taking.

Hypothetical Donation

Hypothetical donation was measured by a question that measures the amount of donations to the charity. This measurement is based on the measurement used in the study by Kahane et al. (2017). 7 Likert type measure was used (1=50 TL, 2=100 TL, 3=150 TL, 4=200 TL, 5=200 TL, 6=250 TL, 7=300 TL).

Donation Scenario. You work in a company. At the end of the first year of your salary, an aid campaign is launched to meet the needs of people in need of food and shelter. In

this campaign, all employees receive 300 TL in addition to their salaries. You have the option to deposit a portion of this premium in the launched charity campaign, or you can choose to keep it all to yourself. If you invest 300, you donate 600 TL at your workplace, if you invest 50 TL, your workplace will donate 100 TL. For each person's donation, the company makes more donations. How much you donated? Donations are taken online system and your name is kept confidential. In this case, how much do you donate 300 TL? Please specify the amount.

Procedure

In data collection of study assessment tools were distributed to volunteered students who are given course credit for their participation. Written informed consent was obtained from students. Participants were told that their identity information is not required and the results will be only use for scientific purposes. Necessary permission for the adaptation process was taken from the first author of the scale. The OUS were translated into Turkish by two translators and then reviewed by two native Turkish-speaking psychologists fluent in English. The Turkish translations of scale collected on one form. Back translation of this final form conducted by two psychologists.

Results

In this section reliability and validity as a part of adaption of OUS and Impartial Beneficence and Instrumental Harm scales to Turkish were presented.

Exploratory Factor Analysis (EFA)

In order to determine construct validity of OUS, Kaiser-Meyer-Olkin coefficient was calculated (KMO=.66) and Barlett Test was applied ($\chi^2=504.89$ df=28 $p<.001$).

First EFA was conducted without any factorial limitations and two factor structures were obtained. Then the factor structure was limited two in order to obtain same structure with original one and Varimax rotation method was adopted.

Table 1

OUS Exploratory Factor Analysis and Factor Loading

Items	Universal beneficence	Instrumental Harm	Total Variance Explained
1	.668	.249	54.24%
2	.742	.027	
3	.717	-.041	
4	.524	-.019	
5	.710	-.034	
6	.036	.769	
8	.032	.799	
9	-.008	.868	
Eigen Values	2.73	1.96	
Explained Variance	28.66%	25.58%	
N	290		

At the end of the analysis the seventh item was taken out its factor loading was less than .40. Analysis was repeated. OUS explained 54.24% of total variance.

Confirmatory Factor Analysis (CFA)

In order to determine whether the two-factor model obtained as a result of the exploratory factor analysis was verified, CFA was performed for the student sample. Item seven was not included in the analysis. In the evaluation of this analysis, the path diagram, the goodness of fit criteria and the suggestions for correction were taken into consideration. According to the proposed modification index, for item 4 and item 5 error variances have been associated. The chi-square difference test (difference 2 difference test) was performed after each error association (Tabachnick & Fidell, 2013, p. 702). Test results show that these error associations make the model more compatible. Compliance indices for the models before and after error associations are given in Table 2. As seen in Table 2, there are significant differences in the fit indices between the first model and the model in which the errors are related; indexes reach acceptable levels in the latest model.

Table 2

The confirmatory factor analysis results for two-factor solution of the OUS

	x ²	df	x ² /df	CFI	GFI	AGFI	RMSEA	IFI	SRMS
First Model	65.707	19	3.458	.903	.948	.902	.092	.905	.0624
One error associated model	36,574	18	2,032	.962	.97	.94	.060	.962	.0485

To assess the model fit, several indexes may be considered. General fitness of the model fit is tested by chi square. It is recommended that x²/df (CMIN/df) value should be under 3. It is recommended that comparative fit index (CFI), root mean square error of approximation (RMSEA), should be incremental fit index (IFI), goodness of fit index (GFI), adjustment goodness of fit index (AGFI), standardized root mean square residual (SRMS) should be used to assess the model fit. Recommended values for good fitness of indices as follows: for CFI >.95; RMSEA<.08; IFI >.95; GFI>.90; AGFI>.90; SRMS<.05 (Karagöz, 2017, p. 463-465). Two factor solution model was tested by AMOS 25.0. The suggested x²/df ratio (x²/df = 2.03), goodness of fit index showed that the fit could be regarded as adequate; IFI = .96, CFI = .994, GFI=.97, RMSEA = .060.

Descriptive Statistics and Reliability

Descriptive statistics of the OUS items are indicated in Table 3. Reliability was assessed using internal consistency indexes. The OUS total had an internal consistency coefficient of .70, instrumental harm .74, impartial beneficence75.

Table 3

The descriptive statistics of OUS items and corrected item correlations

Subscale	Item Number	Mean	Std. dev.	Skewness	Kurtosis	Mini mum	Maxim um	ITC
Impartial beneficence	1	4.42	1.65	-.058	-.951	1	7	.459
	2	2.92	1.71	.882	-.106	1	7	.505
	3	2.47	1.69	1.232	.539	1	7	.479
	4	4.51	1.86	-.273	-1.189	1	7	.329
	5	3.02	1.76	.705	-.542	1	7	.510
Instrumental Harm	6	5.19	1.66	-.588	-.700	1	7	.505
	8	4.43	1.77	-.033	-1.054	1	7	.553
	9	5.04	1.59	-.350	-.873	1	7	.671

N=290

Convergent Validity

In order to evaluate convergent validity, the scores of participants on the OUS total, impartial beneficence and instrumental harm were compared with conceptually related constructs, namely subclinical psychopathy, empathy, perspective taking and hypothetical donation.

The correlations among the variables were within the range of expected values (see Table 4). OUS total was positively correlated with impartial beneficence ($r = .83, p < .001$), instrumental harm ($r = .61, p < .001$), empathy ($r = -.14, p < .05$), perspective taking ($r = -.12, p < .05$) and hypothetical donation ($r = -.24, p < .001$). Impartial beneficence correlated with psychopathy ($r = .21, p < .001$), empathy ($r = -.30, p < .001$), perspective taking ($r = -.22, p < .001$) and hypothetical donation ($r = -.38, p < .001$). Instrumental harm correlated with psychopathy ($r = -.17, p < .01$), empathy ($r = .18, p < .01$).

Table 4

The descriptive statistics of the variables and the correlations among the variables

	1	2	3	4	5	6	7	Mean	Std. dev	Mini- mum	Maxi- mum
N=290											
1.OUS total		.83***	.61***	.07	-.14*	-.12*	-.24***	32.00	7.40	15.00	55.00
2.Universal Beneficence			.077	.21***	-.30***	-.22***	-.38***	17.34	5.86	5.00	35.00
3.Instrumental Harm				-.17**	.18**	.10	.11	14.66	4.09	3.00	21.00
4.Psychopathy					-.33***	-.39***	-.28***	19.39	6.03	9.00	38.00
5.Empathy						.34***	.25***	26.90	4.41	11.00	35.00
6.Perspective Taking							.22***	26.26	5.12	8.00	35.00
7.Hypothetical Donation								5.64	1.74	1.00	7.00

*p<.05 **p<.01***p<.001

Discussion

In the present study, it was aimed to examine the psychometric properties of the OUS in Turkish sample. The KMO value of the Oxford Utilitarianism Scale Exploratory Factor Analysis was found acceptable level (.66). In EFA as the factor loading less than .40, the seventh item was taken out from the scale and analysis carried out with 8 items. After conducting EFA with 8 items, the factor loading of values of the scale items varied between .52 and .86. In the original study of the scale factor loadings varied between .38 and .78 (Kahane et al., 2017). Impartial beneficence explained 28.66% of total variance and instrumental harm explained 25.58% of total variance. These findings show that OUS two factor solution is consistent with the original study. For construct validity CFA was conducted. For OUS two factor model, it was observed that fit indices were found at a good level and were close to the indices in the original study. Two factor models for OUS which included impartial beneficence and instrumental harm was confirmed. At the end of the analysis it is determined that the scale is valid.

For convergent validity of Turkish version of OUS high and medium level correlations was obtained. It was observed that OUS total was positively correlated significantly with impartial beneficence and instrumental harm. In the original study they are also correlated positively (Kahane et al., 2017). In addition to these, subclinical psychopathy was found to be correlated significantly both impartial beneficence and instrumental harm. In contrast to original study, it was found that impartial beneficence was positively correlated with psychopathy while instrumental harm negatively correlated with psychopathy. As mentioned before generally psychopathy was found to be positively and empathy was found to be correlated negatively with utilitarianism in the literature (Bartels & Pizarro, 2011; Carmona-Perera, Verdejo-García, Young, Molina-Fernandez, & Pérez-García, 2012; Duke & Bègue 2014; Gleichgerrcht & Young, 2013; Kahane et al., 2015; Gleichgerrcht & Young, 2013; Kahane, Everett, Earp, Farias, & Savulescu, 2015; Koenigs, Kruepke, Zeier, & Newman, 2012; Patil, Melsbach, Hennig-Fast & Silani, 2016). In their scale validation study Kahane et al. (2017) aimed to differentiate utilitarianism in two dimensions. They found that OUS total and impartial beneficence was negatively correlated with psychopathy and positively correlated with empathy while instrumental harm positively correlated with psychopathy and negatively correlated with empathy. However, in this study we found a different pattern. OUS total and impartial beneficence showed similar pattern in terms of psychopathy, empathy, perspective taking and hypothetical donation as in the original study and in this study, but OUS total and impartial beneficence was found to be correlated positively with empathic concern, perspective taking, hypothetical donation in the original study and was found to be negatively correlated in this study.

Examination of the items showed that questions included in impartial beneficence were not totally but partially self-sacrificial. For example, item four suggests that “it is just as wrong to fail to help someone as it is to actively harm them yourself”. This decision includes consideration oneself responsibility for all humanity. For instrumental harm items for example item eight which suggests “It is permissible to torture an innocent person if this would be necessary to provide information to prevent a bomb going off that would kill hundreds of people”. This item mentions about hypothetical situation but includes saving lives. Maybe participants consider the second situation as life or death. But for the first situation which includes partially self-sacrifice they didn't feel responsibility.

Moreover, all the items in the impartial beneficence were personal while the items in the instrumental harm were impersonal in other words they were related to third person. In

their study Greene et al. (2001) found that personal utilitarian actions were required more effortful thinking and they were considered as inappropriate to reject but impersonal decisions did not show similar pattern. In addition to this Baron, Gürcay and Luce (2018) found that empathy positively correlated with utilitarian acts. Participants felt sympathy for the actor who made utilitarian decisions in their study. So it may be the case that utilitarian judgements can lead empathic concern and also decreasing psychopathy.

In contrast to those findings, OUS total, impartial beneficence and instrumental harm significantly correlated with empathy, psychopathy, donation and perspective taking. Results suggest that this scale had convergent validity for the Turkish version of the scale. Cronbach alpha coefficients which was calculated for to determine reliability of the Turkish version of OUS impartial beneficence was found .74 and instrumental harm was found .75. These results are satisfactory.

The results of the present study should be considered in the light of several strengths and methodological limitations. In their scale development study Kahane et al. (2017) used diverse samples in terms of educational level, age, SES level etc. But in this study only university student sample were used. Gathering data from different samples is considered to be necessary in order to improve generalizability of the results. Finally, due to the difficulties of retesting, not being able to examine the test–retest reliability was another limitation of the present study. In conclusion, the results revealed that the psychometric properties of the OUS were found to be satisfactory in Turkish sample. Further research using demographically diverse populations is encouraged to strengthen and support the psychometric properties of the OUS in different cultures.

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Appendix

Oxford Utilitarianism Scale

Turkish translations of measures as administered in study

Item	Brief English Item	Full Turkish Item
1	If the only way to save another person's life during an emergency.....	Acil bir durumda başka bir kişinin hayatını kurtarmanın tek yolu, kendi bacağına feda etmekse, o zaman bu fedakarlığı yapmak ahlaki olarak gereklidir.
2	From a moral point of view, we should feel obliged to give one of our kidneys...	Ahlaki açıdan bakarsak, böbreklerden birini böbrek yetmezliği olan bir kişiye vermek zorunda hissedebiliriz; çünkü hayatta kalmak için iki böbreğe ihtiyacımız yok, sağlıklı olmak için sadece bir tanesine ihtiyacımız var.
3	From a moral perspective, people should care about the well-being of all human beings on the planet equally...	İnsanlar ahlaki açıdan bakıldığında, gezegendeki bütün insanların refahını eşit olarak önemsemelidir, onlara sadece fiziksel ya da duygusal yakınlığı olan insanların (arkadaşlar, aile vb) iyiliğini desteklememelidir.
4	It is just as wrong to fail to help someone as...	Birine yardım edememek, birine aktif olarak zarar vermek kadar yanlıştır.
5	It is morally wrong to keep money that one doesn't really need...	Bir insanın, ihtiyaç sahiplerine bağış yapabilme imkanı varsa, ihtiyaç duyduğundan fazla parayı kendisine saklaması ahlaki olarak yanlıştır.
6	It is morally right to harm an innocent person...	Masum bir insana zarar vermek, diğer birçok masum insana yardım etmek için gerekli bir araç ise ahlaki olarak doğrudur.
8	It is permissible to torture an innocent person....	Eğer yüzlerce insanı öldürecek bir bombayı önlemek için bilgi edinmek söz konusuysa, masum bir kişiye işkence etmeye izin verilebilir.

9	Sometimes it is morally necessary for innocent...	Daha fazla sayıda insanın kurtarılması söz konusuysa, masum insanların ölmesi, ikincil bir zarardır ve ahlaki olarak gereklidir.
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