



Validation of the Moral Disengagement Scale among Some Iranian University Students

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Abstract

Background: Moral disengagement is a variable in the social cognitive theory of morality and includes eight cognitive, psychosocial mechanisms by which moral self-sanctions are selectively disengaged from inhumane conduct.

Objectives: The aim of the present study was to validate a university student replica of the moral disengagement scale among some Iranian university students.

Methods: This validation study was based on the confirmatory factor analysis (CFA) method. The statistical population consisted of 346 undergraduate students at the Salman Farsi University of Kazerun. Also, 44 other undergraduate students were participated to examine the test-retest reliability of the scale. Both samples were selected by convenient sampling. The main sample completed the 32-item Moral Disengagement scale and the Marlowe-Crowne Social Desirability Scale. CFA (by AMOS 24), stability coefficients, Cronbach's alpha, and multiple analysis of variance (ANOVA) (all by SPSS 16) were used to study gender differences.

Results: The indices of CFA for the 32-item scale were not satisfactory, then an item in all subscales with the lesser beta was dropped, and the scale included only 24-items. The indices of CFA of the 24-item scale were satisfactory. The internal consistency for the whole scale was desirable ($\alpha: .817$) and for the subscales were adequate. Test-retest correlations were not desirable for the whole scale ($r: .693$) and for the subscales. The total score and the scores of some subscales were negatively correlated with social desirability. The total score and the scores of some subscales also were greater in males.

Conclusions: The satisfactory indices of CFA and also the higher scores of males in the 24-item scale confirmed its construct validity. However, correlations between the scale and social desirability did not confirm the ideal divergent validity. Thus, assessing the social desirability beside the scale can clarify interpreting the scores. The obtained test-retest reliability suggests that this scale cannot assess a stable variable, and according beside the social cognitive theory, it is better to consider moral disengagement as a changeable and inconstant variable.

Keywords: Advantageous Comparison, Attribution of Blame, Euphemistic Labeling, Dehumanization, Diffusion of Responsibility, Displaced Responsibility, Disregarding the Consequence, Moral Disengagement, Moral Disengagement Scale (MDS), Moral Justification

1. Background

One of the questions in moral psychology has been why people with high moral reasoning do not always behave according to their moral standards (1). Bandura has answered it by his social cognitive theory and has explained morality more than abstract moral reasoning (2). He has proposed moral disengagements as cognitive psychosocial mechanisms, by which moral self-sanctions are selectively disengaged from inhumane conduct (3). It allows people to sidestep their internalized moral standards and behave immorally without feeling distress (4).

Moral disengagement includes eight mechanisms; in moral justification, detrimental conduct is cognitively reconstructed as serving socially worthy or moral purposes. By euphemistic labeling, language is used to appear harmful conduct, like respectable activities. In advantageous comparison, injurious conduct is compared with more reprehensible activities. Under displaced responsibility, people view their harmful actions stemming from the dictates of authorities rather than being personally responsible for them. Under diffusion of responsibility, personal agency is obscured by diffusing responsibility; for example, in collective action or group decision-making. In dis-

regarding or distorting the consequence, individuals minimize, disregard, or distort the effects of their harmful action. By dehumanization, self-censure for injurious conduct can be disengaged or blunted due to divest victims of human qualities. In attribution of blame, the actor of immoral view themselves as faultless and get blamed for the victims of their immoral action (3, 5, 6).

According to literature (4, 7, 8), moral disengagement leads to many unethical and antisocial tendencies and prevents ethical and prosocial behaviors. Some studies also have shown a higher level among male adolescents and adults than females (3, 5, 6, 9, 10). This is congruent to literature about gender differences in other moral/immoral variables and can be attributed to gender role socialization (11). Considering the role of moral disengagement in the prosocial and antisocial behaviors (4, 7, 8), and growing interest to reduce it in moral education (4, 12, 13), there has been increasing attention to moral disengagement in many different fields, such as criminal psychology (14) sport psychology (13), school psychology (15), occupational psychology (16), etc. Validating a Persian replica of a moral disengagement scale can help Iranian researchers and educators to study the effectiveness of interventions for decreasing moral disengagement.

2. Objectives

The current scale to assess moral disengagement is the Moral Disengagement Scale (MDS) that was developed by Bandura et al. and administrated on Italian elementary and high school students (5). Also, Pelton, et al. validated MDS among African-American adolescents (17). The scale has also been validated among different populations, including Iranian high school students (18). However, in the original scale and its Persian language replicas, the scale has been validated to assess children and young adolescents, and applying it for participants with higher age was limited. Another Persian scale to assess moral disengagement (19) was according to a specific scale (20) for measuring moral disengagement about violating civic duties and obligations and did not assess moral disengagement for aggression and violence that had been studied in the main Bandura's scale.

Detert et al. (9) have changed the phrases of the main Bandura's scale and adapted it for use on some American university students. Because many psychological studies are carried out among university students, the validation of university student replica of moral disengagement can facilitate the studies in the realm among the Iranian population. The aim of the present study was to validate the adult-adapted MDS among some Iranian university students.

3. Methods

3.1. Participants

This validation study was based on the confirmatory factor analysis (CFA) method. This method, at least, needs 200 cases; however, a larger sample size is recommended (21). The statistical population of this study was students of Salman Farsi University of Kazerun (Iran). The sample consisted of 346 undergraduate students in the university that were selected by convenient sampling and were studying different fields (208 females, mean age: 21, SD: 1). Test-taking was done collectively in different groups after classroom times. In addition, 44 other undergraduate students of the university participated in assessing test-retest reliability (32 females, mean age: 20, SD: 1) Test-retest was done at three to four weeks interval.

3.2. Instruments

3.2.1. Moral Disengagement

The original 32-item Bandura's MDS is scored on a 3-point Likert-type scale (5, 17). Detert et al., to validate the scale after changing its phrases, used a 5-point Likert ranging scale. They confirmed its validity by CFA and its reliability by internal consistency (Cronbach's alpha: .87) (9). Although they decreased the items to 24 items, they presented all items that are applicable to college students (appendix 1). In this study, all 32 items were used for translation and validation. To obtain more variance for factor analysis, the 10-point Likert scale was used.

The collaborative approach was used to translate the scale (22). The scale was separately translated into Persian by three individuals who were familiar with the English language. Then, the translated scales were coordinated according to the original replica by the first author of the article. Therefore, the items were presented to some psychology students who were taught about mechanisms of moral disengagement. They had to individually choose which items are related to the mechanisms. Then, they presented their suggestions to change the phrases in a meeting. Their suggestions were coordinated according to the original English replica, and some modifications were made to the primary Persian phrases (appendix 2). Final sentences were presented to 12 undergraduate physics students to report their understanding of them. They did not report any ambiguity about the sentences.

3.2.2. Social Desirability

In many self-report scales, measurement of variables contacts to social desirability as pretending to be moral or positive (23, 24). Accordingly, the lack of relationship with

social desirability can be considered as the divergent validity of a scale (24, 25). The 13-item version of the Marlowe-Crowne Social Desirability Scale (26) was used to evaluate the divergent validity of the scale. Internal consistency (using the Kuder-Richardson's formula) of the Persian version of the scale among some university students was obtained 0.51 (24).

3.3. Statistical Analysis

CFA was assessed using AMOS24 software. Normed fit index (NFI), comparative fit index (CFI), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), Tucker-Lewis index (TLI), and incremental fit index (IFI) as some indices of CFA usually range from 0-1, and a higher value (< 0.9) indicates a better fit. Also, χ^2/df less than 3 represents a good fit. RMSEA value of 0.05 indicates a convergence fit, and values between 0.05 and 0.08 suggest a reasonable error of approximation. In addition, a model with the smallest Akaike information criterion (AIC) and expected cross-validation index (ECVI) has a better fit (21). Other analyses were done by SPSS 16. To study reliability, Cronbach's alpha and stability coefficients were used. The acceptable value of reliability for a research scale is at least 0.7 (27). Discriminant validity was studied by the Pearson correlation coefficient. In addition, multiple analysis of variance (MANOVA) was used to study gender differences in moral disengagement and its subtypes.

3.4. Ethical Considerations

All participants voluntarily participated in the study. Also, the examiners made the individuals assure of the confidentiality of data.

4. Results

Table 1 represents the descriptive statistics of the variables. According to the table, except for advantageous comparison, the Skewness and Kurtosis values were between +2 and -2. The results of the CFA are presented in Table 2. The χ^2/df and RMSEA values of the primary model (the 32-item scale) were acceptable, but NFI, CFI, GFI, AGFI, TLI, and IFI values were not much desirable (< 0.9). Table 3 presents the standardized regression coefficients (beta weight) of the items for this primary model. All regression coefficients were statistically significant ($P < 0.001$).

Due to some inadequate indices, the model was reanalyzed after modification according to the suggestions offered by the software. The residual errors of some variables that were in a subscale were connected (ten connections). NFI, CFI, GFI, AGFI, TLI, and IFI values were still undesirable (Table 2). To obtain the desirable indices, omitting

Table 1. Descriptive Statistics

	Mean (SD)	Skewness	Kurtosis
Moral justification	13.31 (5.31)	0.42	-0.22
Euphemistic labeling	10.86 (4.81)	1.02	1.05
Advantageous comparison	6.46 (3.5)	2.77	11.36
displacement of responsibility	17.16 (5.50)	-0.03	-0.38
Diffusion of responsibility	16.27 (5.43)	0.03	-0.2
Distortion of consequences	8.87 (4.56)	1.15	0.98
Attribution of blame	11.37 (4.77)	0.62	0.03
Dehumanization	12.06 (7.07)	0.84	-0.11
Total	96.35 (24.74)	0.56	0.3
Social desirability	5.92 (1.69)	-0.03	-0.436

the items with low beta coefficients was done. Similar to the Detert et al. (9) approach, to achieve the equal weight of the subscales for calculating the total score, an item in each subscale with a lower beta in that subscale was omitted (Table 3). Then, the scale became a 24-item scale. Re-analyzing the data by CFA showed more desirable indices. Also, after other modifications that were suggested by the software, the indices become more desirable. AIC and ECVI decreased in each stage, and other indices become better. However, AGFI and NFI were still a little less than 0.90 (Table 2). All betas were statistically significant and are presented in Table 3. The final model and its modifications are presented in appendix 3.

Table 4 represents the reliability of subscales and the whole scale using the test-retest and internal consistency (Cronbach's alpha). According to the table, the internal consistency of the subscales was between .482 and .851, and stability was between .363 and .693. Because Cronbach's alpha is sensible to the number of items and each subscale only has three items, the mean of correlation coefficients was calculated that was between .238 and .656 (Table 4) and adequate (28). The stability of the total score of the scale was .693, and internal consistency was .817. The correlation of social desirability with the scale and subscales was only significant for advantageous comparison ($r: -0.133, P < .05$), distortion of consequences ($r: -0.128, P < .05$), and total moral disengagement ($r: -0.124, P < .05$).

Analysis of the gender differences in moral disengagement and its subscales using MANOVA indicated the total gender differences. Pillai's Trace: 0.098; F: 4.533; $P < 0.01$; η^2 : 0.098; observed power: 0.997). However, for any variables, only males were found with significantly higher values regarding the total score of moral disengagement (F: 11.45, $P < .01$, η^2 : 0.032, Observed power: 0.921) moral justification (F: 28, $P < .01$, η^2 : 0.76, Observed power: 1), advan-

Table 2. Fitness Indices of Different Models

Model	χ^2/df	RMSEA	GF	AGFI	NFI	CFI	IFI	TLI	AIC	ECVI
32-item	1.971	0.053	0.866	0.838	0.713	0.830	0.749	0.849	954.511	2.767
32-item with modifications	1.762	0.047	0.881	0.853	0.749	0.870	0.873	0.849	954.511	2.767
24-item	1.761	0.047	0.914	0.884	0.813	0.907	0.910	0.886	546.393	1.584
24-item with modifications	1.563	0.40	.924	0.897	.836	0.932	0.934	0.915	503.478	1.459

Table 3. Standardized Regression Coefficients (Betas) of the Items According to Their Subscale^a

Subscale and Item	Beta (Primary Model)	Beta (final model)
Moral justification		
1	0.575	0.512
2	0.416	Omitted
3	0.578	0.503
4	0.727	0.802
Euphemistic labeling		
5	0.437	0.414
6	0.418	Omitted
7	0.564	0.551
8	0.495	0.481
Advantageous comparison		
9	0.603	0.596
10	0.807	0.808
11	0.541	Omitted
12	0.752	0.777
Displacement of responsibility		
13	0.524	0.478
14	0.468	Omitted
15	0.559	0.570
16	0.621	0.685
Diffusion of responsibility		
17	0.360	Omitted
18	0.388	0.404
19	0.456	0.580
20	0.585	0.513
Distortion of consequences		
21	0.573	0.733
22	0.680	0.540
23	0.672	0.508
24	0.467	Omitted
Attribution of blame		
25	0.342	Omitted
26	0.493	0.462
27	0.451	0.512
28	0.535	0.581
Dehumanization		
29	0.786	0.796
30	0.822	0.828
31	0.796	0.788
32	0.595	Omitted

^aFor all regression weights: $P < 0.001$.

tageous comparison ($F: 6.62, P < .05, \eta^2: 0.019$, Observed power: 0.73), and Dehumanization ($F: 6.1134, P < .05, \eta^2: 0.018$, Observed power: 0.69).

Table 4. Reliability of the Scale by The Coefficient of Stability and Internal Consistency (Cronbach's Alpha) and Also the Mean of Correlation of Items in Each Subscale^a

	α	Mrs	Stability (r)
Moral justification	0.690	0.427	0.693
Euphemistic labeling	0.482	0.238	0.571
Advantageous comparison	0.769	0.527	0.363
Displacement of responsibility	0.609	0.245	0.546
Diffusion of responsibility	0.509	0.245	0.445
Distortion of consequences	0.660	0.415	0.575
Attribution of blame	0.536	0.423	0.617
Dehumanization	0.851	0.656	0.417
Total	0.817	–	0.693

Abbreviation: Mrs, mean of rs of the items of any subscales

^a P of rs < 0.01

5. Discussion

The CFA indices for the 24-item version of the scale were desirable; thus, it can be said that its construct validity was confirmed. In the study by Detert et al., the 32-item scale was finally changed to a 24-item one (9). However, in their study, the omitted items were different from those of the present study. It is possible that when validation of the scale is done among different populations (e.g., laborers, soldiers, prisoners, etc.), the omitted items would be different. It can be suggested that in new validations among different populations, the 32-item and not the 24-item version should be used. Another evidence regarding the construct validity of the scale was a higher score of males in total score and some subscale of the scale, which is consistent with previous studies on moral disengagement (3, 5, 6, 10) and also some other lowly moral variables (11).

This is ideal for the divergent validity of a self-report scale when it does not have a correlation with social desirability. However, in many cases, such ideal validity was not obtained for many scales (24, 25). In this study, the total moral disengagement and its two subscales were correlated with social desirability. One of the methods for a more accurate assessment of original moral disengagement in future studies is assessing social desirability as well as controlling the effects of social desirability by some statistical strategies.

Internal consistency reliability of the scale was desirable. Also, because the mean inter-item correlation was ad-

equate (28), the lower Cronbach's alpha values of each subscale can be attributed to the few numbers of each items (27). The test-retest reliability of the scale and the subscales were significant, but it was not ideal. This can be attributed to the nature of social disengagement as a variable in the social cognitive theory of Bandura. One of the presuppositions of the theory against trait theories is the nonstability of human behaviors and cognition as well as the effects of situational factors on them (2). Accordingly, the lack of high stability among the variables of this theory is acceptable.

5.1. Conclusion

The results showed that the 24-item MDS is applicable for studies among Persian university students and probably among other Persian adults.

5.2. Limitations

This validation study was done on undergraduate students. For the use of scale among different populations, it is ideal to culturally fit the phrases of the 32 items for them, then re-examine the validity and reliability of the scale.

References

Supplementary Material

Supplementary material(s) is available [here](#) [To read supplementary materials, please refer to the journal website and open PDF/HTML].

Footnotes

Authors' Contribution: Alireza Azimpour suggested the subject of investigation, supervised data gathering, monitored data analysis by the software, analyzed data, and wrote the article. Navid Karimian gathered data and conducted literature research. Nurallah Mohammadi advised the investigation. Maryam Azarnioshan and Fatemeh Rahmani conducted data collection and data analysis by the software.

Conflict of Interests: There is no conflict of interest.

Ethical Approval: This paper is based on a master's thesis by Navid Karimian in the Salman Farsi University of Kazerun, supervised by Alireza Azimpour and advised by Norallah Mohammadi. The proposal of this study was confirmed by the Psychology Department Committee of the university and the Research Committee of the university. (IRANDOC Cod: 1498406).

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