

RESEARCH ARTICLE / ARAŞTIRMA YAZISI

The Adult Bullying Scale: An Adaptation Study

Yetişkinlerde Zorbalık Ölçeği: Bir Uyarlama Çalışması

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Abstract:

This study aimed to adapt the “Bullying Questionnaire” developed by Baughman and his colleagues to Turkish culture. The study sample consists of 542 adults. The sociodemographic information form prepared by the researcher, The Bullying Questionnaire, The Second Revision of the Revised Cyber Bullying Scale - II and The Dirty Dozen Scale were used for data collection. For the analysis of the data, exploratory and confirmatory factor analysis was performed using SPSS 26 and AMOS 24 programs. Kaiser-Meyer-Olkin (KMO= .940) Measure of Sampling Adequacy and Bartlett’s Test of Sphericity ($\chi^2= 6150.337$, $sd=153$, $p<.05$) were conducted to determine the conformance of data to factor analysis. According to the exploratory factor analysis, the final version of the scale accounts for 51% of the total variance and consists of 18 items gathered under 1 factor. Confirmatory factor analysis was used to test the results obtained as a result of exploratory factor analysis. It was concluded that the results obtained from confirmatory factor analysis (CMIN/DF= 5.021, GFI= .90, CFI= .92, NFI= .91, RMSEA= .09, RMR= .048) were consistent with the findings of exploratory factor analysis. Cronbach's alpha, item-total correlation, test-retest and similar scale validity methods were used in the validity and reliability analyses of the scale. The Cronbach's alpha internal consistency coefficient obtained from the overall scale was calculated as .94. The findings obtained as a result of the analyses were discussed in the framework of the literature, and it was determined that the Bullying Questionnaire had the necessary psychometric properties.

Keywords: *Adult Bullying, Bully, Bullying, Reliability, Validity.*

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Öz:

Bu çalışmanın amacı Baughmann ve arkadaşları tarafından geliştirilen Yetişkinlerde Zorbalık Ölçeği'ni (Bullying Questionnaire) Türk kültürüne uyarlamaktır. Araştırmanın örneklemini 18-64 yaş aralığındaki 542 yetişkin oluşturmaktadır. Verilerin toplanmasında katılımcıların sosyodemografik bilgilerini içeren araştırmacı tarafından hazırlanan Sosyodemografik Bilgi Formu, Yetişkinlerde Zorbalık Ölçeği (Bullying Questionnaire), Yenilenmiş Siber Zorbalık Envanteri-II ile Karanlık Üçlü Ölçeği kullanılmıştır. Verilerin analizinde SPSS 26 ile AMOS 24 programları kullanılarak açımlayıcı ve doğrulayıcı faktör analizi yapılmıştır. Verilerin faktör analizine uygunluğuna bakma amacıyla Kaiser-Meyer-Olkin (KMO=.940) katsayısı ve Bartlett Küresellik Testi ($\chi^2=6150.337$, $sd=153$, $p<.05$) hesaplanmıştır. Yapılan açımlayıcı faktör analizi ile ölçeğin, toplam varyansın %51.24'ünü açıklayan tek faktörlü ve 18 maddeden oluşan son haline karar verilmiştir. Açımlayıcı faktör analizi ile elde edilen sonuçların test edilmesi için doğrulayıcı faktör analizi yapılmıştır. Doğrulayıcı faktör analizinden elde edilen sonuçların (CMIN/DF= 5.021, GFI= .90, CFI= .92, NFI= .91, RMSEA= .09, RMR= .048) açımlayıcı faktör analizi bulguları ile uyumlu olduğu sonucuna ulaşılmıştır. Ölçeğin geçerlik güvenirlik analizlerinde Cronbach's alfa, madde toplam korelasyonu, test-tekrar test ve benzer ölçek geçerliği yöntemleri uygulanmıştır. Ölçeğin Cronbach's alfa değeri .94 olarak hesaplanmıştır. Yapılan analizler sonucunda elde edilen bulgular alanyazın çerçevesinde tartışılmış, Yetişkinlerde Zorbalık Ölçeği'nin gerekli psikometrik özelliklere sahip olduğu saptanmıştır.

Anahtar Kelimeler: Yetişkin Zorbalığı, Zorba, Zorbalık, Geçerlik, Güvenirlik.

Introduction

Bullying is defined as a person's regular and conscious display of aggressive behavior with the aim of harming someone s/he considers to be weaker physically or psychologically (Piotrowski & King, 2016). The concept of bullying in adults entered the literature with the studies by Randall (1997). Bullying among adults has many negative consequences. For example, there appears to be a relationship between adult bullying and narcissism (Baughman et al., 2012). Retrospective studies show that those who went through bullying during their childhood are at high risk for the use of alcohol, marijuana and illegal drugs during their young adulthood period and that they have criminal behaviors (Kim et al., 2011). Due to its possible negative consequences, working with bullies as well as victims to prevent bullying leads to behavioral change (for exm., Masakala et al., 2023). It is necessary to distinguish adult bullies in order to identify adult bullies who have many difficulties, such as involvement in crime work-relationship problems, and to prevent adult bullying and thus protect the victims. In this context the main purpose of this study is to conduct a validity and reliability study by adapting the "Bullying Questionnaire" (Baughman et al., 2012) scale to Turkish. Thus, a measurement tool to measure bullying behavior in adults will be attempted to be brought into the Turkish literature. Through this scale, it is hoped to lead future scientific studies by understanding adult bullying, which is a subject open to research.

Method

Processes and Participants

Within the scope of the adaptation study, firstly, a study permit (-100-4209, EKK21-22/012/06) was obtained from the Cyprus International University Ethics Committee after obtaining the necessary written approvals for the scales used in the study.

A backward translation pattern was used in the adaptation phase of the Adult Bullying Scale (ABS). Following the translation stages, the finalized scale was applied to 35 people and its clarity was checked. During the adaptation phase of the scale, items can be added or removed from the scale by taking into account the effect of culture (Jesus and Valente, 2016). In this context, Dr. Tony Vernon, one of the developers of the scale, was contacted and permission was obtained to add or remove items from the scale in order to make it suitable for Turkish culture. With the pilot study, clarity was checked with the opinions of the participants, and information was obtained about the scale items and their personal experiences regarding bullying behaviors. As a result, item 18, that is "I spoke ill of someone to others around them so that s/he felt left out," was added to the scale. When the questions in the survey were asked to the participants, answers such as "We would do it not within 1 month, but before." were received. The "answer by considering the last month" prompt of the scale was updated to "answer by thinking of the last six months" and also by contacting the researchers who developed the original scale.

The data were collected from social media (Instagram, Twitter) between April and August 2022, via Google Forms, using the convenience sampling method. When the data collection process was over, agreed to participate in the study and voluntarily filled out the informed consent form 563 participants were reached. Outliers were removed from the data set and analyses continued with 542 participants.

The number and percentage distributions of the participants' descriptive characteristics are shown in Table 1.

Table 1. Descriptive Characteristics of Participants

Variable	Groups	Participant number (n)	Percentage (%)
Gender	Female	262	48.3
	Male	280	51.7
	Total	542	100.0
Marital Status	Married	184	33.9
	Single	322	59.5
	Divorced	26	4.8
	Widower	10	1.8
	Total	542	100.0
Education Level	Primary School (1)	40	7.4
	Middle School (2)	49	9.0
	High School (3)	117	21.6
	Associate/Bachelor Degree(4)	263	48.5
	Master/Ph.D.(5)	73	13.5
	Total	542	100.0

When the data obtained from the research were examined, the average age of the participants was 31.71. It is observed that 262 of the participants were females (48.3%) and 280 were males (51.7%). It is observed that 184 participants who have made up the sample are married (33.9%), 322 participants are single (59.5%), 26 participants are divorced (4.8%), 10 participants are widower (1.8%). It was seen that 40 people included in the sample were primary school graduates (7.4%), 49 were middle school graduates (9.0%), 117 were high school graduates (21.6%), 69 had associate degree (12.7%), 194 had bachelor's degree (35.8%), 70 had master's degree (12.9%) and 3 had Ph.D. (0.6%).

Data Collection Tools

Sociodemographic Information Form

The researcher created a four-question Sociodemographic Information Form to obtain socio-demographic information from the participants. Name and surname were not requested in the Sociodemographic Information Form, but participants were expected to answer questions about age, gender, marital status, and educational status.

Adult Bullying Scale (ABS)

The original scale was prepared as a 5-point Likert type (Baughman et al., 2012). Participants were prompted to respond to the behavioral statements given by checking "Never" if it was never done in the last month, "Rarely" if it was done once, "Sometimes" if it was done 1-3 times, "Often" if it was done 4-8 times, and "Always" if it was done more than 8 times. As the score of the person filling out the scale increases, bullying behavior increases. The scale has 4 sub-dimensions, namely "direct physical bullying, direct verbal bullying, direct bullying (the sum of direct physical and direct verbal bullying), and indirect bullying", and 5 separate scores are obtained from the scale. In the Adult Bullying Scale, Cronbach's alpha value was .69 for direct physical bullying subscale, .83 for direct verbal bullying subscale, .86 for direct bullying (sum of

direct physical and verbal bullying), and .76 for indirect bullying subscale and .89 for the total bullying score (Baughman et al., 2012). As a result of the analyses conducted for similar scale validity, a high correlation was found between the Machiavellianism subscale and direct verbal bullying ($r = .35$) subscale, the narcissism subscale and indirect bullying ($r = .21$) subscale, and the psychopathy subscale and direct bullying ($r = .53$) subscale (Baughman et al., 2012).

Revised Cyber Bullying Inventory-II (RCBI-II)

In this study, the Revised Cyber Bullying Inventory-II (RCBI-II), was used and Cronbach's alpha coefficient is .80 for cyber victims and .79 for cyber bullying (Topçu & Erdur-Baker, 2018). In this study, the "I did it" section of the RCBI-II cyberbullying scale was used. In this study, Cronbach's alpha coefficient for cyberbullying of RCBI-II was .78.

Dirty Dozen Scale (DDS)

The developers of the scale are Jonason and Webster (2010), and the adaptation of the scale to Turkish as well as its validity and reliability studies were carried out by Eraslan-Çapan et al. (2015). The scale has three sub-dimensions, which are Machiavellianism, psychopathy, and narcissism. Cronbach's alpha coefficients were calculated as .79 for the Machiavellianism dimension, .71 for the psychopathy dimension, and .87 for the narcissism dimension, respectively (Eraslan-Çapan et al., 2015). In this study, Cronbach's alpha coefficient was .86 for the Machiavellianism dimension, .78 for the psychopathy dimension, and .90 for the narcissism dimension.

Statistical Analyses

In the analysis of the data, exploratory and confirmatory factor analysis was performed using SPSS 26 and AMOS 24 programs. For the validity-reliability study conducted in the first phase of the study, the scale structure determined by exploratory factor analysis was tested by confirmatory

factor analysis. Bartlett Tests and Kaiser-Meyer-Olkin (KMO) analysis were performed to check the conformity of the data set to factor analysis. The next step in the validity studies of the ABS, which has been found to be suitable for factor analysis, is the exploratory and confirmatory factor analysis to examine the structure validity of the scale. In the reliability studies of the scale, on the other hand, Cronbach's alpha and item total score correlation were examined to check internal consistency and homogeneity. For the criterion validity of the scale, the relationship between similar scales and (Dirty Dozen Scale and Revised Cyber Bullying Inventory – II) was examined using Pearson Correlation analysis. To examine the invariance of the scale over time, the test-retest method was used and Pearson Correlation analysis was performed.

Results

Internal Consistency of ABS

Since an item was added to the scale, Cronbach's alpha value was first calculated. In the analysis conducted to find the internal consistency of the scale, Cronbach's alpha coefficient, which was .89 in the original scale (Baughman et al., 2012), was found to be .94 in this study. This value indicates that the internal consistency of the scale is high. As seen in Table 2, the item-total correlations of all items of the ABS are positively loaded and vary between .507 and .807. Considering the item-total correlation values, it was decided that no item should be removed from the scale since there was no significant increase in Cronbach's alpha value in case of the deletion of any item from the scale, and no item was below the value of 0.25. It was considered appropriate to include all items in the analyses.

Table 2. Item Total Correlation Results of ABS

Item no.	Scale Average When the Item Is Removed	Corrected Item Total Correlation	Cronbach Alpha Value When the Item Is Removed
ABS1	28.65	.507	.942
ABS2	28.10	.583	.941
ABS3	28.43	.612	.940
ABS4	28.91	.624	.940
ABS5	28.68	.688	.939
ABS6	28.60	.773	.937
ABS7	28.76	.614	.940
ABS8	28.66	.770	.937
ABS9	28.62	.589	.941
ABS10	28.49	.807	.936
ABS11	28.19	.729	.938
ABS12	28.42	.758	.937
ABS13	28.87	.594	.941
ABS14	28.23	.710	.939
ABS15	28.75	.737	.938
ABS16	28.61	.578	.941
ABS17	28.80	.729	.938
ABS18	28.75	.669	.939

Structure Validity of the Scale

Accordingly, for the testing of the structure validity, the control of outliers which refer to the extreme values that are not parallel to the data set, the item analysis, in which the suitability of the scale items to the scale is determined, and the exploratory and confirmatory factor analysis are utilized.

Exploratory Factor Analysis

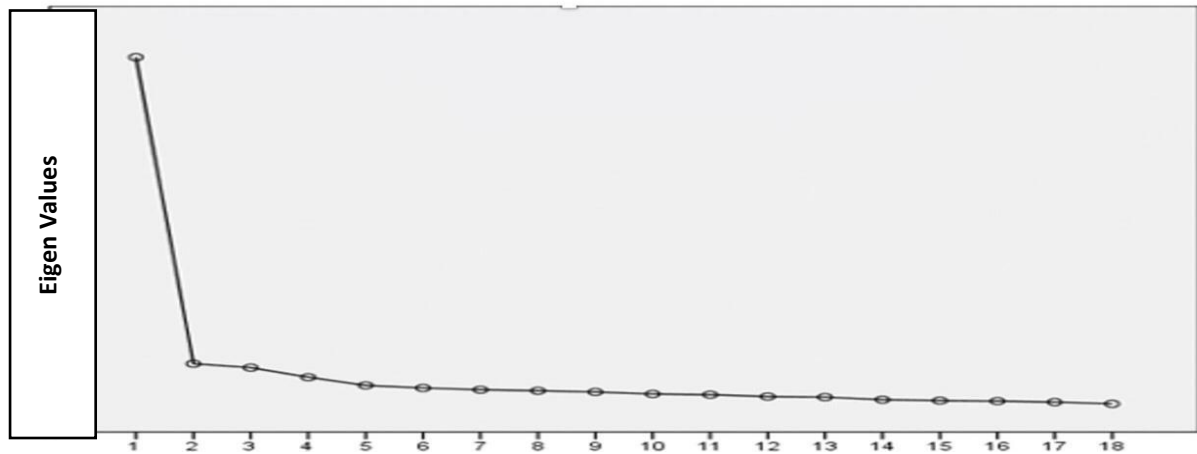
It is seen that the first factor alone accounts for 51.236% of the variance, the second factor alone accounts for 6.797% of the scale, and the third factor alone accounts for 6.231% of the scale. The variance value accounted for by three factors is 64.264%. It is sufficient for the total variance value accounted for by the factors to be between 40% and 60% (Shkeer and Awang, 2019).

Table 3. The Eigenvalues of the Adult Bullying Scale Items and the Variance Ratios They Describe

	Initial Eigenvalues			Eigenvalues Obtained After Conversion					
	Tot.	Variance %	Cum.%	Tot.	Variance%	Cum.%	Tot.	Variance%	Cum.%
1	9.222	51.236	51.236	9.222	51.236	51.236	5.119	28.437	28.437
2	1.223	6.797	58.033	1.223	6.797	58.033	3.823	21.241	49.678
3	1.122	6.231	64.264	1.122	6.231	64.264	2.625	14.586	64.264
4	.870	4.836	64.100						
5	.658	3.657	72.756						
6	.591	3.284	76.040						
7	.546	3.031	79.071						
8	.518	2.879	81.951						
9	.487	2.706	84.656						
10	.434	2.409	87.065						
11	.415	2.308	89.373						
12	.367	2.041	91.414						
13	.352	1.953	93.367						
14	.286	1.590	94.957						
15	.261	1.448	96.405						
16	.247	1.374	97.779						
17	.222	1.236	99.015						
18	.177	.985	100.000						

However, although it is found that there are three factors as a result of the exploratory factor analysis, it is seen that the values of the second and third factors have values quite close to the value of 1, so their eigenvalues are quite weak. Following these values obtained, the Scree-Plot Graph was reviewed in order to decide on the conformance of the scale for evaluation with a 3-factor structure. The point where the slope starts to disappear on the graph is used to determine

the number of factors (Gorsuch, 1990). According to the Screen-Plot Graph (Figure 1), the slope began to flatten after the first point due to the fracture that occurred after the first dimension. The contribution of the factors after the first point to the variance is both small and approximately the same. This result suggested that it would not be appropriate to evaluate the scale with a three-factor structure.

Figure 1. Scree Plot Graph for Adult Bullying Scale**Scree Plot Graph**

Item no.

In order to decide whether to continue with the three-factor structure of the scale, the relationship of the scale items with each other was also examined. As can be seen in Table 4, the fact that the 14 items of ABS (except 3, 5, 13 and 1)

show a high degree of relationship with each other indicates that there may be a multiple connection problem. These results indicate that it would be appropriate to evaluate the scale with a single-factor structure.

Table 4. Factor Loads and Values Belonging to the Items of the Adult Bullying Scale

	Item		
	1	2	3
ABS3	.735		
ABS12	.721	.309	
ABS5	.719		
ABS18	.713	.396	
ABS14	.661		.316
ABS8	.642	.425	
ABS10	.633	.429	.347
ABS11	.588		.435
ABS6	.531	.399	.483
ABS7	.507	.378	
ABS13		.826	
ABS17	.404	.728	
ABS15	.473	.683	
ABS4		.645	.365
ABS16	.426	.570	
ABS1			.810
ABS9		.478	.651
ABS2	.480		.645

When deciding on the number of factors of ABS, the assumption that ABS has a one-factor structure was reinforced, taking the item total correlation results seen in Table 2, the variance ratios seen in Table 3 and the slope determined in Figure 2 into account. Accordingly, it is possible to say that the Adult Bullying Scale has a one-factor structure that accounts for 51% of the total variance, instead of three factors. In order to clarify this situation, confirmatory factor analysis was performed using the AMOS program.

Confirmatory Factor Analysis

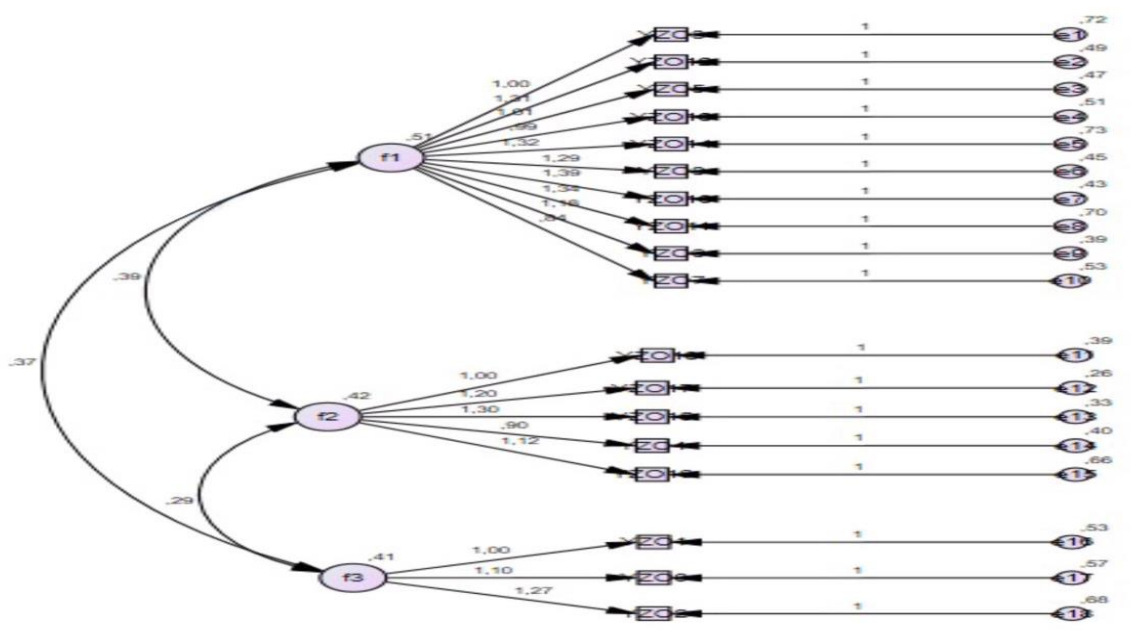
Confirmatory factor analysis (CFA) was conducted through the AMOS 24 program to check the data compliance with

the single-factor structure obtained from the exploratory factor analysis conducted for the validity studies of ABS. The results of confirmatory factor analysis can be seen in Table 5. As the result of the examination of the CFA results (CMIN/DF: 7.822, GFI: .81, CFI: .85, NFI: 0.83, RMSEA: .11, RMR: .06), it is observed that the scale is not compliant with the three-factor model in parallel to the exploratory factor analysis findings. Compliance indices obtained by the confirmatory factor analysis repeated in a way to be a one-factor structure should be within the acceptable compliance limits (CMIN/DF: 5.021, GFI: .90, CFI: .92, NFI: .91, RMSEA: .09, RMR: .048), and thus, it was decided that it would be more appropriate to evaluate ABS in a single-factor structure.

Table 5. Confirmatory Factor Analysis Results of Adult Bullying Scale

Reviewed Compliance Index	Compliance Criteria	CFA Compliance Index of ABS	Single-Factor Compliance Index of ABS
CMIN/DF	≤ 2.5 perfect fit for small sample ≤ 3 perfect fit for large sample ≤ 5 moderate fit	7.822	5.021
GFI	≥ 0.85 good ≥ 0.90 perfect	.812	.90
CFI	≥ 0.90 good ≥ 0.95 perfect	.852	.92
NFI	≥ 0.90 good ≥ 0.95 perfect	0.83	.91
RMSEA	≤ 0.05 perfect ≤ 0.06 – 0.08 good ≤ 0.10 poor fit	.112	.09
RMR	≤ 0.08 good fit	.063	.048

Figure 2. Confirmatory Factor Analysis of the Adult Bullying Scale



Criterion Validity

In this study, the validity of the criterion was examined by examining the relationship between Adult Bullying Scale, and Revised Cyber Bullying Scale-II (Topçu & Erdur-Baker, 2018) and Dirty Dozen Scale (Eraslan-Çapan et al., 2015) and calculating the correlations of ABS with similar scales. Before starting the analysis, the normality distribution was examined and it was decided to make Pearson correlation analysis as the data showed a normal distribution. As seen in Table 2, there was a positive and highly statistically significant relationship between ABS

and RSBS-II scores ($r=.80$; $p<.05$); a positive and highly statistically significant relationship between ABS and DDS scores. There was a positive and highly statistically significant relationship between ABS and DDS Machiavellianism subscale scores ($r=.63$; $p<.05$); a positive and moderately statistically significant relationship between psychopathy subscale scores ($r=.58$; $p<.05$); and a positive and moderately statistically significant relationship between narcissism subscale scores ($r=.54$; $p<.05$). A positive and highly statistically significant relationship ($r=.80$, $p<.05$) was observed between ABS and

the cyberbullying subscale scores of the Revised Cyber Bullying Scale-II. As a result, it is possible to say that the scale meets the criterion validity.

Test-Retest Reliability

In this study, test-retest method was applied to 43 people with a one-week interval. The correlation value between the pre-test and post-test scores of the scale was $r = .97$, and a significant relationship was found.

Discussion

The aim of the study is to adapt the "Bullying Questionnaire" (Baughman et al., 2012) to Turkish. As a result of the analyses conducted in this study, Cronbach's alpha coefficient shows that the scale is reliable. Cronbach's alpha coefficient was found to be higher in the study conducted, compared to the original form of the scale (Baughman et al., 2012). Consequently, the result obtained shows similarity to the original scale.

As a result of the analyses, it was decided to evaluate ABS with a single dimension. The scale includes items to detect physical, verbal, indirect and cyber bullying. Although there were four factors with eigenvalues above 1 in the study conducted by Baughman et al. (2012), only one factor was suggested in the Screen Plot Graphs. The scale developers thought that the first factor in the exploratory factor analysis was a general bullying factor because it was approximately three times the total variance of the second, third and fourth factors. Despite this, the study continued with a four-factor model of the scale. During the denomination of the subscales in their study, Baughman et al. (2012) decided to classify the types of bullying as "indirect bullying, direct physical bullying, direct verbal bullying, direct physical and verbal bullying" based on Olweus's (2004) study. Among the scale items, questions about cyberbullying and sexual bullying were distributed to existing subscales. When the literature was examined, the types of bullying were seen to be classified differently. For example, bullying can be addressed under two categories: direct and indirect bullying (Olweus, 2004).

Beale (2001), on the other hand, addresses bullying under four categories, namely physical, verbal, relational and reactive bullying. Crick and Bigbee (1998) divided bullying into two categories, namely overt and relational. Elliot (2002), unlike other researchers, divided bullying into three groups, which are physical, verbal and sexual bullying. Although cyber and sexual bullying are different types of bullying, it is thought that the scale does not contain enough items to form a subscale for these types of bullying. The fewer the number of items in the scales, the lower the coverage rate of the behavior and subject to be measured, and thus the validity of the scale is affected negatively (Williams et al., 2010). Accordingly, it is possible to say that the number of items in the third factor (item 1, item 2 and item 9) alone is not sufficient to create a factor. With respect to other bullying-related scales; The Peer Bullying Identification Scale developed by Ayas and Pişkin (2015) consists of 53 items and six factors. Among the factors of physical bullying, verbal bullying, isolation, damaging property, sexual bullying and rumor spreading, the factor with the least number of items is rumor spreading with 5 items. Satan and Kulaksızoğlu's (2008) Bullying Behavior Tendency Scale, which consists of 67 items, has four sub-factors, namely emotional bullying, bullying for fun, physical bullying and verbal bullying. The factor with the least number of items among the sub-factors is emotional bullying with 8 items (Satan & Kulaksızoğlu,

2008). Bullying Scale for Adults, which consists of 21 items applied to university students, consists of four different sub-factors: sexual harassment, emotional abuse, physical abuse and problems at school. It was observed on the scale that the sub-factor of the problems at school consists of 2 items, and the factor with the highest number of items consists of 8 items (Haidl et al., 2020). In addition, when examining the factor loadings of ABS, the item 8, which is about cyber bullying, is seen to be loaded on the first factor and the second factor; in a similar way to the items 16 and 17, which are about sexual bullying. Considering the fact that all items of the ABS except 4 items are loaded on each other and all other information, it was decided that it would be correct to gather the scale items under a single factor. Peer bullying scales adapted or developed in Turkish culture (Ayas & Pişkin, 2015; Satan & Kulaksızoğlu, 2008) have more items and subscales. It is thought that the number of items of the ABS may represent some culture-specific bullying behaviors in the context of sub-factors. For this reason, it is suggested that an adult bullying scale suitable for Turkish culture needs more examples of different bullying behaviors.

In the study conducted, similar scale validity was examined to examine the criterion validity of the scale. For this purpose, RCBS-II and DDS were used. As a result of the analyses, ABS has statistically significant relationships with the total and all subscales of RCBI-II and DDS. With regard to similar scale validity, values between .30 and .64 were accepted as a moderate level of relationship, and values of .65 and above were considered as a high level of relationship (Grgic et al., 2020). ABS was found to have highly positive correlations with the total scores of other scales. Although no study has been found on the relationship between cyberbullying and adult bullying, the results of this study are similar to the results of studies conducted with children-adolescents and university students. Modecki et al. (2014) stated in their study that they found a high correlation between traditional bullying and cyberbullying.

Other variables associated with adult bullying are narcissism, psychopathy, and Machiavellianism, which constitute DDS. Narcissism refers to individual characteristics such as feeling the need to establish authority over other people, excessive self-admiration, and regarding oneself as superior to other people (Campbell et al., 2011). These people, who have little tolerance for criticism and do not value the people around them (Paulhus & Williams, 2002), are unable to empathize (Kanten, 2014). Machiavellian individuals, who act in line with their own interests and can lie, are defined by characteristics such as emotional coldness, lack of empathy, and tendency to manipulation (Furtner et al., 2011). Tostlebe (2023) states that psychopathy can be defined by individual characteristics such as unreliability, tendency to lie, lack of feelings of regret and shame, and pathological self-centeredness. It is thought that impulsivity and tendency to violence (West et al., 2023) and low empathy ability (Stark et al., 2023) underlie the psychopathy. With regard to the personality characteristics of bullies, features such as putting pressure on other people (Olweus, 2004), lack of empathy and low auto-control (Kanten, 2014), and the need to see oneself as special stand out. Child-adolescent bullies may continue to bully in their adulthood period, too. Adult bullies are more likely to be prone to crime and engage in aggressive behavior in their relationships or work life than other people (Randall, 1997). When the characteristics

represented by DDS are compared with the characteristics of bullies, the similarities are striking. In summary, it is an expected result that the correlations between ABS and the subscales of RCBI-II and DDS are significant. The results obtained, the study by Baughman et al. (2012) on adults, the study by Flexon et al. (2016) on young adults, the study by Goodboy and Martin (2015), who examine the relationship of adult cyber bullies with the dark triad, show similarity to the results of the study by Tokarev et al. (2017) on the relationship between workplace bullying, the dark triad and depression.

Conclusion

The final version of the scale, consisting of a one factor and 18 items, was decided. Confirmatory factor analyses was conducted to test the results obtained with exploratory factor analyses. Cronbach's alpha, item-total correlation, test-retest and similar scale validity methods were applied in the validity and reliability analyses of the scale. The results of the analyses carried out in this study to adapt the Bullying Questionnaire (Baughman et al., 2012) scale into Turkish indicate that the scale is valid and reliable. This adaptation study is a powerful study with regard to the sample size and to the fact that it was a study carried out by sticking to the methods followed in the validity and reliability studies.

Recommendations

In future studies on the subject, researchers may study a revised form of the scale with the addition of new items that will better represent the sub-dimensions of bullying. To this end, it is thought that further research is needed.

It is thought that ABS can be used to understand and examine adult bullying in detail and to determine its relationship with different variables to identify the bullying-related characteristics. Thus, it is hoped that it will pave the way for future studies when determining the topics to be studied in psychotherapeutic applications, as well.

Declarations

Conflict of Interest

The authors declared that there is no conflict of interest.

Financial Disclouser

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Ethics Committee Approval

Within the scope of the adaptation study, firstly, a study permit (-100-4209, EKK21-22/012/06) was obtained from the Cyprus International University Ethics Committee after obtaining the necessary written approvals for the scales used in the study.

Authors' Contributions

FG contributed greatly to the writing of the method and discussion section, summary and abstract of the article. ŞT contributed to the overall writing and proofreading of the article. FG and GDK analyzed and interpreted the research data. FG, GDK and ŞT made a great contribution to writing the introduction and discussion section of the article. GDK contributed greatly to data collection. All authors have read and approved the final version of the article.

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