

Turkish Adaptation of Counter-Empathy Scale and its Psychometric Properties

Karşıt-Empati Ölçeğinin Türkçe Uyarlaması ve Psikometrik Özellikleri

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ABSTRACT

Objective: This study aims to adapt the Counter-Empathy Scale, which assesses counter-empathy, a new concept in the literature, to Turkish and to examine its psychometric properties.

Method: The study was conducted with a community sample of 347 people, 209 (60.2%) of whom were women, aged 18-66 (34.04±12.66), reached through convenience and snowball sampling methods. Counter-Empathy Scale (CES), Toronto Empathy Scale (TES), Adult Prosocialness Scale (APS), Horney-Coolidge Tridimensional Inventory (HCTI), and Existential Anger Scale (EAS) were applied to the participants.

Results: As a result of the confirmatory factor analysis conducted for the validity of the scale, it was determined that the goodness of fit index values ($\chi^2/df=3.21$, AGFI=0.89, GFI=0.91, CFI=0.92) were at an acceptable level, and the 2-factor model proposed in the original study was confirmed. In addition, it was observed that the factor loadings of all items in the scale varied between .55 and .81. Statistically significant results were obtained in the correlation analyses conducted for convergent validity. It was also determined that the scale could distinguish groups with a history of psychiatric or psychological help from groups without at a significant level. It was determined that the Cronbach Alpha reliability coefficients of the scale were .87 for the entire scale, .84 for the dimension of taking pleasure in others' pain, and .86 for the sub-dimension of feeling annoyed with others' happiness. The item-total correlations of all items were above .50. It was observed that the test-retest correlation coefficients were between .71 and .86.

Conclusion: The results obtained from all analyses showed that the Counter-Empathy Scale is a valid and reliable scale with strong psychometric properties and is a measurement tool that can be used in research conducted in Turkish culture and clinical settings.

Keywords: Counter-empathy, empathy, validity, reliability, adaptation

ÖZ

Amaç: Bu çalışmada alanyazında henüz yeni bir kavram olan karşıt-empatiyi değerlendiren Karşıt-Empati Ölçeği'nin Türkçe'ye uyarlanması ve psikometrik özelliklerinin incelenmesi amaçlanmıştır.

Yöntem: Yaş aralığı 18-66 olan (34.04±12.66) 209'u (%60,2) kadın 347 kişiden oluşan kolayda ve kartopu örnekleme yöntemiyle ulaşılan toplum örnekleme ile çalışma gerçekleştirilmiştir. Katılımcılara Karşıt-Empati Ölçeği (KEMPÖ), Toronto Empati Ölçeği (TEÖ), Yetişkin Prososyallik Ölçeği (YPÖ), Horney-Coolidge Üç Boyut Envanteri (HCTI) ve Varoluşsal Öfke Ölçeği (VÖÖ) uygulanmıştır.

Bulgular: Ölçeğin geçerliği için yapılan doğrulayıcı faktör analizi sonucunda, uyum iyiliği indeks değerlerinin ($\chi^2/df=3.21$, AGFI=0.89, GFI=0.91, CFI=0.92) kabul edilebilir düzeyde olduğu saptanarak orijinal çalışmada önerilen 2 faktörlü modelin doğrulandığı tespit edilmiştir. Ayrıca ölçekteki bütün maddelerin faktör yüklerinin .55 ile .81 aralığında değiştiği görülmüştür. Yakınsak geçerlik için gerçekleştirilen korelasyon analizlerinde istatistiksel olarak anlamlı sonuçlar elde edilmiştir. Aynı zamanda ölçeğin psikiyatrik ya da psikolojik yardım yüküsü olan grupları olmayan gruplardan anlamlı seviyede ayırt edebildiği tespit edilmiştir. Ölçeğin Cronbach Alfa güvenilirlik katsayılarının tüm ölçek için .87, başkalarının açısından zevk alma boyutu için .84 ve başkalarının mutluluğundan rahatsız olma alt boyutu için .86 olduğu ve bütün maddelerin madde toplam korelasyonlarının .50'nin üzerinde olduğu saptanmıştır. Test-tekrar test korelasyon katsayılarının ise .71 ile .86 arasında olduğu görülmüştür.

Sonuç: Yapılan bütün analizlerden elde edilen sonuçlar Karşıt-Empati Ölçeği'nin güçlü psikometrik özelliklere sahip geçerli ve güvenilir bir ölçek olduğunu, Türk kültüründe yapılan araştırmalarda ve klinik ortamlarda kullanılabilecek bir ölçüm aracı olduğunu göstermiştir.

Anahtar sözcükler: Karşıt-empati, empati, geçerlik, güvenilirlik, uyarlama

Introduction

It is suggested that empathy, which plays an important role in our emotional and social interactions, is necessary for healthy relationships, understanding, and cooperation between people, prevents aggression, and supports moral behavior (Bošnjaković and Radionov 2018). Empathy has been founded in relationships with life satisfaction, psychological well-being (Morelli et al. 2015), and pro-social behaviors such as helpful behaviors, cooperation, and altruism (Eisenberg et al. 2010, Feldman et al. 2015, Batson 2018). Empathy is also asserted to be very important in regulating social relationships, especially by facilitating prosocial behaviors (Eisenberg 2000).

Empathy is characterized as understanding another's emotional state or conditions, experiencing an emotional response similar to the emotion the other person feels, and a motivation to mitigate the distress of others (Eisenberg and Fabes 1998, Eisenberg 2000, Batson 2009). Generally considered a two-component structure, the cognitive dimension of empathy refers to understanding other people's experiences, and the emotional dimension refers to the ability to indirectly feel the emotional experiences of others (Reniers et al. 2011). Empathy is often used in the literature to understand negative events and situations. However, empathy does not only refer to how bad people feel when negative events happen to them (i.e. negative empathy), but also how good they feel when others experience positive events (i.e. positive empathy) (Cikara et al. 2014, Morelli et al. 2015).

However, it can be observed that people do not always show an empathic attitude towards positive or negative events and situations that happen to others, in some cases they can even adopt the opposite attitude. The counter-empathy concept has emerged as a concept that explains such non-empathic attitudes. Counter-empathy defines an emotional response of a person that is incompatible and contradictory with the emotional state of another individual (Yamada et al. 2011). It can be argued that the basic motivating factor in the emergence of counter-empathy is taking pleasure from the negativity experienced by another individual or group (Dasborough and Harvey 2017). Situations representing counter-empathy can also occur in daily life. For example, a person's jealousy when a colleague they dislike gets promoted, or their happiness when a person they envy loses their reputation due to an unfortunate event (Takahashi et al. 2009), cheers and cries of joy when a rival team loses, smiling when a rival politician makes a mistake or gets involved in a scandal (Smith et al. 2009) are examples of counter-empathy. Therefore counter-empathy is considered an umbrella concept consisting of two separate emotions. The German words that define these emotions, "Schadenfreude", refer to the feelings of pleasure a person experiences in response to another person's failures or misfortunes, "Glückschmerz" refers to the feelings of pain from another person's pleasure (Feather 2006, Smith and van Dijk 2018, Hudson et al. 2019).

The inverse relationship between counter-empathy and empathy may enable the suppression or modification of negative emotions such as jealousy and schadenfreude that emerge in competitive encounters (Gonzalez-Liencrez et al. 2013). In the literature, more studies have investigated the relationship between empathy deficit and many mental disorders including personality disorders than counter-empathy, counter-empathy has still been found to be associated with many mental disorders such as narcissism, antisocial personality disorder and its traits, depression, and social anxiety (Miller and Eisenberg 1988, Jolliffe and Farrington 2004, Lovett and Sheffield 2007, James et al. 2014, Pietraszkiewicz and Chambliss 2015, Wang et al. 2019, Erzi 2020, Demeter et al. 2021, Yegenah 2022, Erzi 2022). When evaluated in a social sense, it can be seen that the concept of counter-empathy can be characterized as malicious and immoral emotions (Leach et al. 2003, Hudson et al. 2019). Singer et al. (2006) found that men exhibited counter-empathetic reactions when they observed someone suffering from unfair behavior. Counter-empathy has been associated with hostile emotions such as anger, contempt, and disgust (Ruppel and Einwiller 2021), aggressive behavior and externalizing disorders (Vachon and Lynam 2016), aggression and antisocial behavior (Dryburgh and Vachon 2019), and prejudice against minority or out-group individuals (Vanman 2016, Hudson et al. 2019). It has also been found that it usually occurs in rival sports teams or political groups (Leach et al. 2003, Ouwerkerk et al. 2018) or competitive groups (Cikara et al. 2014). At the same time, it is also claimed that counter-empathy is a research topic that people deny and do not show to others because they think they will be condemned, and therefore it is an overlooked research topic (Hornik et al. 2021). For this reason, it is seen that not much work has been done on it yet. Though it is thought that the measurement of counter-empathy will provide important information to the literature in terms of understanding both intra-group and/or inter-group interactions and examining its relationship with psychopathology.

The closest measurements to the Counter-Empathy Scale (CES) developed by Jie and Wang (2023) are made through the assessment of jealousy (Glückschmerz mentioned above) and Schadenfreude. However, it is seen that the measurement tools for these two concepts do not assess both together, focus on only one dimension,

and some of their items do not fully meet counter-empathy [See. Trait Schadenfreude Scale (TSS; Baren 2017, Affective and Cognitive Measure of Empathy-Affective Dissonance (ACME-AD; Vachon and Lynam 2016)]. Unlike the one-dimensional structure of these scales, CES combines both measurements by proposing a two-dimensional structure of feeling annoyed with others' happiness (FAOH) and taking pleasure in others' pain (TPOP). At the same time, the items measuring these two dimensions are more specific and expressed in clear language. It also differs from these two measurements by measuring emotional reactions that are inconsistent or opposite to those of others. Therefore, it offers a more comprehensive assessment opportunity for oppositional empathy than these scales.

It has been observed that CES has not yet been adapted to another language. The concept of Schadenfreude, which is the malicious joy experienced in the face of misfortune, especially in the face of another individual or group, has been the subject of research in many fields such as social psychology, clinical psychology, psychiatry, marketing, organizational behavior, sports and social media (Wakefield and Wakefield 2023). However, no measurement tool in our country will allow the investigation of this concept. Therefore, to evaluate the two-way structure of counter-empathy together to use it in studies conducted in the Turkish literature, this study aimed to adapt the CES to Turkish and examine its validity and reliability.

Method

Sample

The study was conducted with a community sample consisting of 347 people, 209 female (%60.2) and 138 male (%39.8), living in Istanbul and aged between 18 and 66 (34.04 ± 12.66). The study's inclusion criterion was determined as being literate and over the age of 18, in addition, the exclusion criterion was as being under 18 and illiterate, and the data were collected using convenience and snowball sampling methods. Although data were obtained from 352 participants, 5 people were not included in the analyses because they filled in the data systematically. The participants 46 (13.3%) had primary school education, 56 (16.1%) had high school education, 31 had an associate degree (8.9%), 186 had university graduation (53.6%), 23 had a master (6.6), and 5 (1.5%) had a doctorate; 181 (52.2%) were single, 151 (43.5%) were married, 9 (2.6%) were divorced, and 6 (1.7%) were spouseless. When the economic levels of the participants was examined, it was determined that 13 (3.8%) were low, 196 (56.5) were medium, and 138 (39.8%) were high.

Variable		n	%
Gender	Woman	209	60.2
	Man	138	39.8
Education	Primary-secondary school	46	13.3
	High school	56	16.1
	Associate Degree	31	8.9
	Licence	186	53.6
	Master's Degree	23	6.6
	Doctorate	5	1.5
Marital Status	Married	151	43.5
	Single	181	52.2
	Divorced	9	2.6
	Wife Deceased	6	1.7
Economic Level	Low	13	3.8
	Medium	196	56.5
	High	138	39.8
Psychiatric or Psychological Disorder	Yes	37	10.7
	No	310	89.3
Seeking Psychiatric or Psychological Help	Yes	39	11.2
	No	308	88.8

37 (10.7%) of the participants stated that they had a psychiatric or psychological disorder, 310 (89.3%) did not, and 39 (11.2%) were currently receiving psychiatric or psychological help, while 308 (88.8%) did not (Table 1). In addition, the CES was administered twice, four weeks apart, to a group reached through a convenience sampling method among all participants for test-retest application. This group consists of a total of 39 volunteer students, 30 female (76.9%) and 9 male (23.1%), aged between 18-26 (22.23 ± 2.13) studying at the Department of Psychology at Istanbul Sabahattin Zaim University.

Procedure

Before starting the study, permission and scale information were obtained from the first author of the scale for the adaptation study. Then, ethics committee permission dated July 2024 and numbered 2024/06 was obtained from the Istanbul Sabahattin Zaim University Ethics Committee for the research. Since the scale is in Chinese, one academic and two translators, had the scale translated into Turkish, then the items most suitable for the Turkish language were selected by the researchers from these three translations, and the scale was finalized.

When determining the scales to be used in the study, since do not Turkish scale that evaluates counter-empathy, choices were made in line with the information in the literature. Considering the negative relationships of counter-empathy with empathy and prosociality and positive relationships with aggression in the literature was used in the study to evaluate the scales related to empathy (TES), prosociality (APS) and anger (EAS) and it was also Horney-Coolidge Tridimensional Inventory (HCTI) for determined which personality types they may be associated with. The data collection process of the study was carried out by giving the scales to the researchers' relatives and to the students themselves and their relatives in the form of a paper-pencil test, since the scales were self-report scales. Therefore, the data were collected with convenience and snowball sampling methods. The application of the scales took approximately 15-20 minutes and voluntary consent was obtained from all participants.

Measures

Demographic Information Form

This form created by researchers that includes information such as the participants' age, gender, marital status, educational status, and history of receiving psychological or psychiatric help.

Counter-Empathy Scale (CES)

The scale developed by Jie and Wang (2023) to measure counter-empathy consists of 14 items and is a five-point Likert type. Exploratory factor analysis and confirmatory factor analysis revealed a two-factor structure for CES. These factors are; taking pleasure in the pain of others (TPOP), which includes statements such as "I like to see others afraid", "I like to see others embarrassed", and being bothered by the happiness of others (FAOH), which includes items such as "I get disappointed when I see others succeed easily", "I feel wronged when I have to work hard to do something easy for others to do". Conducted at six-week intervals test-retest reliability ranged from .65 to .81. Internal consistency coefficients were determined as .85 for FAOH and .86 for TPOP.

Adult Prosocialness Scale (APS)

The validity, and reliability study of the scale developed by Caprara et al. (2005) as 16 questions was carried out by Bağcı and Öztürk-Samur (2016). It is a one-dimensional, five-point Likert-type scale. Confirmatory factor analysis (CFA) was performed to determine the fit of the one-dimensional model of the scale and it was determined that the calculated fit index values were at an acceptable level ($\chi^2=430.84$, $X^2/sd=4.14$, CFI=0.93, NNFI=0.92, NFI=0.92 and GFI=0.85) (Bağcı and Öztürk-Samur 2016).

Toronto Empathy Scale (TES)

The scale developed by Spreng et al. (2009) is a 13-item, 5-point Likert-type scale. In confirmatory factor analysis of the scale adapted to Turkish by Totan et al. (2012), it was seen that the model fit index values were at a reasonable level [$\chi^2= 234.67$, $df= 64$, $\chi^2/df= 3.67$, NFI= .91, GFI= .94, RFI= .90, IFI= .94, CFI= .94, RMSEA= .07, RMR= .05]. Within the scope of reliability analysis were determined .79 with an internal consistency reliability coefficient of the scale.

Horney-Coolidge Tridimensional Inventory (HCTI)

The Turkish adaptation study of the scale developed by Coolidge et al. (2005) to evaluate the three human

typologies in Karen Horney's theory was carried out by Bilge and Bilge (2018). The inventory includes three dimensions: Compliance (type-directed towards people), aggression (type towards people), and detachment (type away from people). The scale, consisting of a total of 57 items, is rated on a 4-point Likert-type scale as "(1) almost never, (2) sometimes, (3) often and (4) almost always". In the adaptation study, test-retest correlations were found to be .79 for compliance and detachment and .86 for aggression. The internal consistency Cronbach Alpha coefficients of the subscales were found to be .74 for compliance, .75 for aggression and .75 for detachment (Bilge and Bilge 2018).

Existential Anger Scale (EAS)

The scale was developed by Deniz (2016) to measure the anger experienced by individuals regarding existence and the meaning of life. The 10-item scale was scored as a 5-point Likert type (1=I do not think this way, 5=I completely think this way) and the lowest score can be obtained from the scale is 10, while the highest score is 50. As a result of the exploratory factor analysis, it was seen that the scale has a one-dimensional structure. Within the scope of the reliability analysis, the Cronbach Alpha internal consistency coefficient of EAS was calculated and found to be .94.

Statistical Analysis

Within the scope of data analysis, firstly, skewness and kurtosis values were calculated in order to determine the suitability of the collected data for statistical analyses and it was determined that the data showed a normal distribution. Then, confirmatory factor analysis (CFA) was performed to determine whether the current structure of the scale was confirmed in Turkish culture within the scope of construct validity. In addition, Pearson Product Moment Correlation coefficient was calculated to determine the correlations between the subscales of CES and other scales within the scope of convergent validity. For test-retest reliability, Pearson Product Moment Correlation coefficient was used for the relationships between the applications made at four-week intervals and paired samples t test was used for the comparison of the test-retest applications made to the same group. Within the scope of discriminant validity, comparison of total and subscale scores of CES according to gender, psychiatric or psychological disorder and psychiatric or psychological help groups was performed with t test for independent samples. Reliability of the scale was determined with Cronbach Alpha coefficient values for subscales and total scale. Analyses were performed with SPSS v.25 and CFA for the verification of measurement model of CES was performed with AMOS v.25 program.

Results

In the scale development and adaptation studies, the number of participants was determined to be at least 10 times the number of items in the scale (Kline 2013), and care was taken to ensure that the number of participants was over 140 people. The statistical analyses of the study were carried out with a data set of 347 people, as 5 people filled in the scales systematically. In addition, the kurtosis and skewness values of the data were calculated and it was determined that the data set showed a normal distribution

	Acceptable value	Before Modification	Last Modification*
χ^2	-	290.31	241.26*
df	-	76	75
χ^2/df	≤ 0.5	3.82	3.21
AGFI	> 0.85	0.84	0.89
GFI	> 0.90	0.89	0.91
CFI	> 0.90	0.90	0.92
RMR	≤ 0.08	0.075	0.076
SRMR	≤ 0.08	0.07	0.07
AIC	-	348.30	301.26
RMSEA	≤ 0.08	0.09 (0.08-0.10)	0.08 (0.07-0.09)

*Modifications were made between items 13 and 14; AGFI: Adjusted goodness of fit index, GFI: Goodness of fit index, CFI: Comparative fit index, RMR: Root mean square errors, SRMR: Root mean square root of standardized errors, AIC: Akaike information criterion, RMSEA: Root mean square root of approximate errors.

Validity Analysis

Confirmatory factor analysis (CFA) was applied to determine the construct validity of the CES via the SPSS AMOS v.25 program. The χ^2/sd ratio, AGFI (Adjusted goodness of fit index), GFI (Goodness of fit index), CFI (Comparative fit index), RMR (Root Mean Square Error), SRMR (Standardized Root Mean Square Error), AIC (Akaike Information Criterion) and RMSEA (Root Mean Square Error of Approximation) values were used as goodness of fit indices. As a result of the analysis, it was seen that the AGFI value of the model was below acceptable values, but after a modification was made between the 13th and 14th items, the values specified in the literature (Tabachnick and Fidell 2015) were reached. It was also found that the factor loadings of all items were above .55 (Table 2, Table 3, and Figure 1).

Table 3. Factor loadings, reliability coefficients and item-total correlations of the items of the counter-empathy scale		
Scale items	CFA Factor Loadings	Reliability coefficients and ITC
Factor 1: CES-TPOP		$\alpha = 0.84$
1. I like to watch traffic accidents at the roadside.	0.554	0,50
2. I prefer seeing others angry from embarrassment.	0.802	0,75
3. I prefer seeing others frightened.	0.760	0,69
4. I get a kick out of seeing other people feel stupid.	0.670	0,60
5. Sometimes I prefer to see others cry.	0.642	0,57
6. I often feel funny when my friends are angry.	0.621	0,56
7. I like seeing other people uncomfortable.	0.751	0,66
Factor 2: CES-FAOH		$\alpha = 0.86$
8. When I see other people succeed easily. it makes me frustrated at myself.	0.733	0,66
9. It is unfair that some people are born with extraordinary talents.	0.639	0,58
10. When seeing that people who are not as good as me having a better life than me. I am not happy for them.	0.805	0,72
11. I am afraid of being overtaken by competitors.	0.674	0,62
12. I feel it is unfair that I work hard while others can easily achieve the same things.	0.675	0,63
13. I hope that those being more successful than me will fail.	0.596	0,58
14. I feel unpleasant if someone not as good as me achieves something better than me.	0.672	0,66
CES-Total		$\alpha = 0.87$

CES: Counter-Empathy Scale, TPOP: Taking Pleasure In Others' Pain FAOH: Feeling Annoyed With Others' Happiness, ITC: Item total score correlation

Within the scope of convergent validity analysis, the relationships between CES and empathy and prosociality were examined and significant and negative relationships were found between all sub-dimensions of CES, TES, and APS (Table 4). In addition, it was found that the relationships of CES with neurotic personality tendencies HCTI compliance, aggression and disconnection sub-scales, and existential anger were significant and positive as expected (Table 4). In addition, as a result of the t-test analyses conducted within the scope of discriminant validity, it was seen that those with any psychiatric or psychological disorder had a lower significance level of CES-TPOP compared to those without and those currently receiving psychiatric or psychological help compared to those who did not receive it, but had significantly higher scores in all three score types (CES-TPOP, CES-FAOH, and CES-Total) (Table 5). In addition, as a result of the t-test conducted to determine whether the CES subscales differed according to gender, it was determined that only in CES-TPOP, male scores were significantly higher than female scores (Table 5).

Reliability Analysis

Within the scope of reliability analysis, the internal consistency coefficients of the CES were evaluated, and the Cronbach Alpha scores were .84 for TPOP, .86 for FAOH, and .87 for the total scale. The obtained results were found to be above the recommended value of .70 for scale reliability (Büyüköztürk 2002). The subscale and total score averages, standard deviations, and Cronbach Alpha coefficients of the CES are presented in Table 4. Within the scope of item analysis, it was observed that the item-total correlations of the scale items ranged from .50 to .75 and all items were at a sufficient value of .30 and above (Büyüköztürk 2002) (Table 3). In addition, as a result of the test-retest application carried out with an interval of 4 weeks, the correlation coefficients were found to be .71 ($p < .001$) for CES-TPOP, .78 ($p < .001$) for CES-FAOH and .86 ($p < .001$) for CES-Total. According to the paired samples t-test results, no difference was found between the scale mean scores ($t = -1.61$, $p > .05$; for CES-TPOP; $t = 0.75$, $p > .05$ for CES-FAOH; $t = -0.42$, $p < .05$ for CES-Total, respectively).

Table 4. Reliability coefficients of CES total score and subscales, and mean and standard deviation scores, and correlation coefficients between all continuous variables

	α	Mean	SD	1	2	3	4	5	6	7	8	9
1.CESTPOP	.84	10.61	4.62	1	.44**	.80**	-.24**	-.44**	.41**	.45**	.24**	.34**
2. CESFAOH	.86	14.74	6.21		1	.89**	-.29**	-.29**	.29**	.39**	.31**	.22**
3. CESTotal	.87	25.35	9.22			1	-.32**	-.41**	.41**	.49**	.33**	.32**
4. APS	.90	61.17	9.97				1	.52**	-.09	-.11*	-.15**	-.25**
5. TES	.79	54.20	7.54					1	-.20**	-.20**	-.10	-.53**
6.HCTICompliance	.77	44.60	7.87						1	.35**	.07	.05
7.HCTIAgression	.73	42.45	6.80							1	.35**	.13*
8.HCTIDetachment	.72	36.20	6.11								1	.03
9. EAS	.92	16.44	9.00									1

* $p < .05$, ** $p < .01$; 1. CES-TPOP (Counter Empathy Scale-Taking Pleasure In Others' Pain), 2. FAOH: Feeling Annoyed With Others' Happiness, 3. CES-Total, 4. APS (Adult Prosociality Scale), 5. TOE (Toronto Empathy Scale), 6. HCTI-Compliance (Horney-Coolidge Tridimensional Inventory), 7. HCTI-Agression, 8. HCTI-Detachment, 9. EAS (Existential Anger Scale).

Table 5. Comparison of the mean scores of the Counter-Empathy Scale total score and subscales according to the variables of having a psychiatric or psychological disorder, receiving psychiatric or psychological help, and gender

		N	CES _{TPOP}			CES _{FAOH}			CES _{TOTAL}		
			M	SD	t	M	SD	t	M	SD	t
Do you have any psychiatric or psychological disorder?	Yes	37	12.32	5.62	2.41*	17.76	7.48	3.17**	30.08	11.39	3.35***
	No	310	10.40	4.45		14.38	5.95		24.78	8.77	
Are you currently receiving psychiatric or psychological help?	Yes	39	12.56	5.84	2.28*	17.41	5.62	2.88**	29.97	9.73	3.38***
	No	308	10.36	4.39		14.40	6.20		24.76	9.00	
Gender	Woman	209	9.92	4.18	-3.32*	15.13	5.94	1.46	25.06	8.46	0.70
	Man	138	11.64	5.06		14.14	6.56		25.79	10.28	

$p < .05$, ** $p < .01$, *** $p < .001$; $df=345$

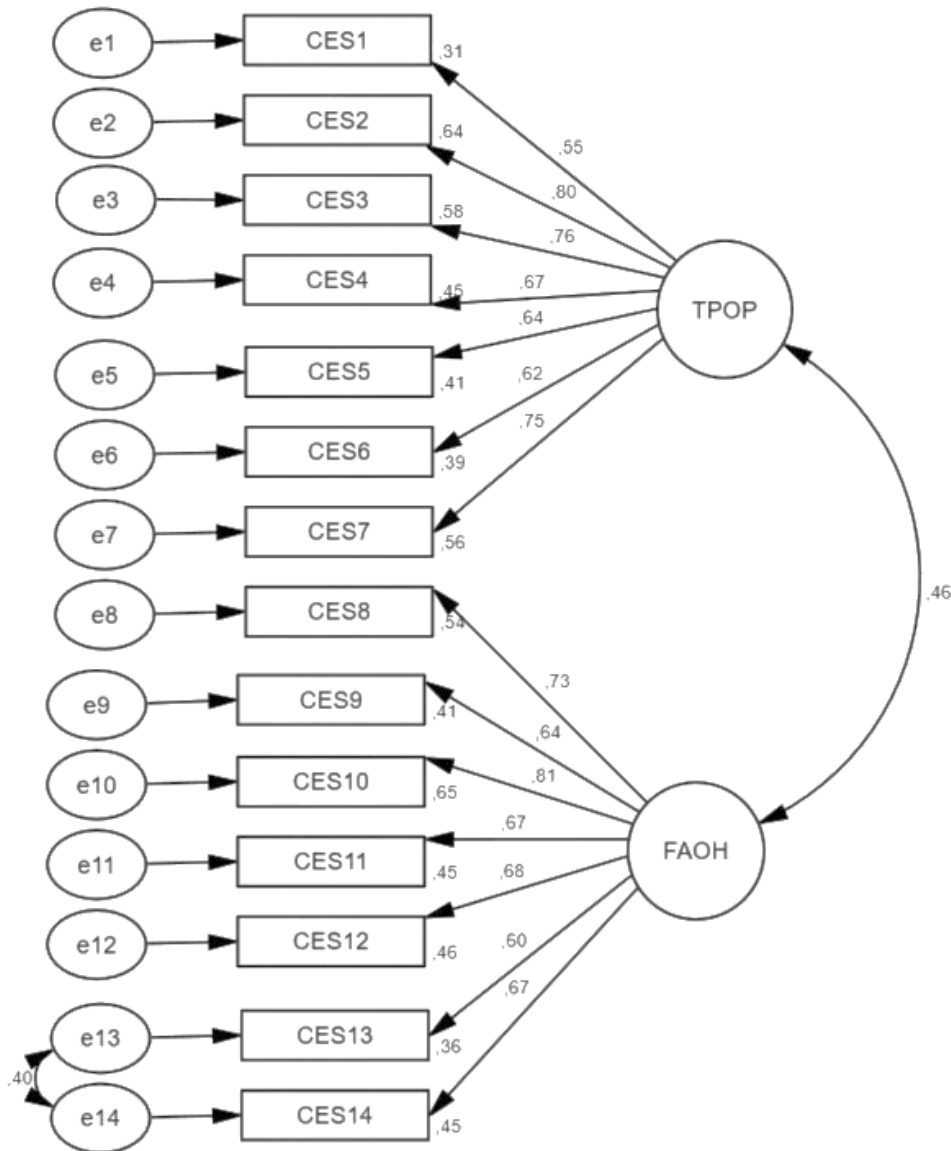


Figure 1. Confirmatory factor analysis of the Counter-Empathy Scale

FAOH: Feeling Annoyed With Others' Happiness, TPOP: Taking Pleasure In Others' Pain.

Discussion

In the study examining the psychometric properties of the counter-empathy scale, counter-empathy, which has been a research topic in the literature since the early 2000s and is a prominent concept in areas such as clinical psychology, psychiatry, sports, and social media (Wakefield and Wakefield 2023), was examined.

Confirmatory factor analysis (CFA) is preferred to determine whether scale adaptation studies are validated in another language and culture. CFA is generally the determination of the level of agreement of a previously proposed model for a structure with the results in another culture (Sümbüloğlu and Akdağ 2009). As a result of the CFA, it was deemed appropriate to modify between items 13. and 14. Modification indices are a sign of how well the model is defined and are indicators that increase the by showing the improvements that may occur in the chi-square value (Meydan and Şeşen 2015). Another point to be considered when making modifications is to correct the fit indices by correlating the error terms of the items in the same factor with each other, while adhering to the theoretical structure, and to ensure that the model becomes suitable (Çokluk et al. 2014). With this modification, it was determined that the model proposed for the CES was verified in our study and acceptable (only AGFI) or good level goodness of fit indices were obtained. Therefore, it was determined that the model proposed by Jie and Wang (2023) overlapped with the Turkish form of the CES and the two-factor structure of the scale was verified as in the original study. In addition, it was seen that the factor loadings of all items were above .55.

As in the original study, the relationships between the CES, the TES, and the APS were examined within the scope of criterion validity. It was determined that there were negative correlations between counter-empathy and prosociality and empathy, similar to the original study. These results are consistent with both the original study and the studies in the literature on counter-empathy (Cikara et al. 2014, Jie and Wang 2023, Yu et al. 2023). In addition, in line with the literature on the positive correlation of counter-empathy with aggression, the relationship of the CES with anger, which is a prerequisite for aggression, was examined and positive and significant correlations were obtained between the CES and EAS, with the highest correlation being with TPOP. In the original study, aggression was measured with the Buss-Perry Aggression Scale, and positive and significant correlations were found in line with this study (Jie and Wang 2023). The feature of anger to disruption of harmony (Markus and Kitayama 1991) explains its positive correlation with counter-empathy and negative correlation with empathy. Similarly, the finding of impaired empathy in men convicted of legally aggressive behavior (Winter et al. 2017) is also consistent with the positive relationship between anger or aggression and counter-empathy. In addition, as a finding supporting the contrast between empathy and counter-empathy, it was found in one study that adults expressed less happiness and more anger at the good fortune of an antisocial person than a prosocial person (Rodriguez-Gomez et al. 2020). Finally, the correlations of the three personality typologies of compliance, aggression and detachment, which represent a pathological aspect of personality and are developed to cope with or avoid the basic anxiety caused by the basic hostility felt towards the parents according to Horney's (1945) theory, with the CES were examined. It was determined that there were positive and significant correlations between the total and sub-dimensions of the CES and these three typologies, they were lower between TPOP and HCTI-Aggression and FAOH and HCTI-Compliance compared to the others. These results provide critical findings revealing the relationships between CES and hostility (or aggression) at the root of these typologies and a neurotic personality structure. Although there are only a few studies in the literature investigating the relationship between counter-empathy and psychopathology and/or personality traits (Vachon and Lynam 2016, Dryburgh and Vachon 2019), these results point to the connection between counter-empathy and the unhealthy side of personality. However, since the number of scales assessing counter-empathy is still very few, it is seen that there are not enough studies in the literature. However, it is seen that more studies are reached if counter-empathy is considered as the opposite of empathy or lack of empathy or if the concept of "schadenfreude" is taken as a basis. In these studies, the connection between counter-empathy and many mental disorders such as the dark triad, narcissism, psychopathy, antisocial behavior, and depression, including personality disorders, is examined (Miller and Eisenberg 1988, James et al. 2014, Wang et al. 2019, Erzi 2020, Demeter et al. 2021, Erzi 2022, Yegenah 2022). In addition, although counter-empathy is rarely studied, it has also been studied in terms of its relationship with personality traits. Counter-empathy is negatively correlated with agreeableness (Greenier 2018) and conscientiousness (Crysel and Webster 2018) traits included in the five-factor personality theory. In addition, counter-empathy is related to moral emotions and behaviors affecting intergroup conflicts (Cikara 2015, Hudson et al. 2019, Hudson et al. 2023). Considering all these studies, counter-empathy has a role in determining mental disorders, personality traits, and intergroup behaviors (especially conflicts), and therefore, studies addressing these connections should be increased. In addition, as a result of comparing those with any psychiatric or psychological disorder with those without and those currently receiving psychiatric or psychological help with those who did not, in terms of the CES scores within the scope of discriminant validity, it was seen that those with any psychiatric or psychological disorder and those receiving psychiatric or psychological help received significantly higher scores in all three score types. In this context, the fact that the total and subscale scores of counter-empathy of those with psychiatric or psychological disorders and those with a history of current psychiatric or psychological help were significantly higher is evidence that the scale has high discriminant validity and points to the possible relationships of counter-empathy with psychopathology. Finally, in the analyses conducted on whether the CES was gender-sensitive or whether it differed according to gender, it was determined that men had higher levels of pleasure in the pain of others than women. This finding is not consistent with the study in the literature that suggests that women show higher levels of counter-empathy than men (Dryburgh and Vachon 2019), but it can be said to be similar to the finding of Singer et al. (2006) that men show counter-empathetic reactions when they observe a person suffering from an unfair behavior with a relative sense of righteousness. The fact that there are few studies in the literature does not yet provide enough findings to enable this or similar comparisons. However, the results obtained still show the possibility that both gender and predisposition to psychopathology may reveal distinctive findings.

According to the internal consistency analysis conducted within the scope of reliability studies, it was determined that the Cronbach Alpha values of CES-TPOP, CES-FAOH and CES-Total were above .80, respectively. Scale reliability Cronbach Alpha coefficients of .70 and higher are considered sufficient for reliability (Büyüköztürk 2002). Again, within the scope of reliability analysis, it was determined that the test-

retest correlations conducted with a four-week interval ranged from .71 to .86, and according to the paired t-test results conducted for these two applications, there was no significant difference between the two applications, and therefore consistent results were obtained from the scale over time. Within the scope of item analysis, it was observed that the item-total correlation values of all items in CES were above .50. According to Büyüköztürk (2002), items with an item-total correlation of .30 and higher are considered good at distinguishing individuals. When these criteria are taken into consideration, it is seen that CES is a reliable scale. In the original study, it was determined that the reliability coefficients calculated for reliability were above .80 for both sub-dimensions and total scores, and the test-retest correlations conducted with a six-week interval ranged from .65 to .81, and that there was a high positive correlation for TPOP and CES-Total and a moderate positive correlation for FAOH (Jie and Wang 2023). Therefore, both the statistically good level of the results obtained in our study and the consistent results with the original study indicate that the CES is a reliable measurement tool.

Although the study was conducted with a community sample, the fact that the results can be generalized can be seen as a limitation, since a significant portion of the participants have a university education level and are single. Although psychiatric and psychological diagnoses were compared in the study, these groups were made according to the reports of the participants. Therefore, it may be more appropriate to conduct studies with patients whose diagnoses were confirmed by an expert and a control group. The fact that the scales used were based on self-reporting and there is no scale directly related to counter-empathy in the literature can also be considered as a limitation, as the small number of convergent validity scales can be considered as a limitation. In addition to these limitations, another limitation is that the desired number of participants was not included in the study because it was difficult to reach the same participants again for the second application. However, there are different opinions on the number of samples required for the test-retest. While Klein (2000) claims that the reliability of 40 and 50 sample sizes for test-retest is weak, some researchers claim that 30 subjects may be sufficient for test-retest reliability (Rea and Parker 1992, Bonnet and Wright 2014).

Conclusion

As a result, in light of the findings obtained, it was determined that the CES is a valid and reliable scale and a measurement tool with psychometric properties that can be used in Turkish culture. With this study, the concept of counter-empathy, which is a new concept in the literature but is thought to be quite related to both psychopathology and some personality traits, was included in the Turkish literature and a scale that can be used for studies on this subject was provided to the literature.

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Addendum 1. Counter-Empathy Scale Turkish Form

Counter-Empathy Scale Turkish Form

	Kesinlikle katılmıyorum (1)	(2)	(3)	(4)	Kesinlikle katılmıyorum (5)
1. Yol kenarındaki araba kazalarını izlemeyi severim.	1	2	3	4	5
2. Başkalarının sinirlendiğini görmek hoşuma gider.	1	2	3	4	5
3. Başkalarının korktuğunu görmek hoşuma gider.	1	2	3	4	5
4. Başkalarının utandığını görmek hoşuma gider.	1	2	3	4	5
5. Bazen başkalarının ağlamasını izlemek hoşuma gider.	1	2	3	4	5
6. Arkadaşlarımın sinirlenmesini çoğu zaman komik bulurum.	1	2	3	4	5
7. Başkalarını rahatsız görmek hoşuma gider.	1	2	3	4	5
8. Başkalarının kolayca başarılı olduğunu gördüğümde çok üzülüyorum.	1	2	3	4	5
9. Bazı insanların olağanüstü yeteneklerle doğmasının adil olmadığını düşünüyorum.	1	2	3	4	5
10. Geçmişte benim kadar iyi olmayan birinin benden daha iyi yaşadığını görmek beni mutsuz eder.	1	2	3	4	5
11. Rakiplerim tarafından geride bırakılmaktan korkarım.	1	2	3	4	5
12. Başkalarının yapması kolay olan bir şeyi yapmak için çok çalışmak zorunda kaldığımda haksızlığa uğramış hissederim.	1	2	3	4	5
13. Benden daha başarılı olanların başarısız olmasını gizlice beklerim.	1	2	3	4	5
14. Benden aşağı düzeyde olan biri benden daha iyi bir şey yaptığında çok mutsuz olurum.	1	2	3	4	5

Rating of the Scale

There are no reverse items in the scale. The scale can be computed as a total score.

Taking Pleasure In Others' Pain sub-dimension: items 1, 2, 3, 4, 5, 6, 7

Feeling Annoyed With Others' Happiness: items 8, 9, 10, 11, 12, 13, 14