Role of Callous-Unemotional Traits in prediction of Childhood behavior problems

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In the present Study, translation of Inventory of Callous-Unemotional Traits (Parent version) into Urdu language was carried out. This inventory was devised by Frick (2004). Callous-Unemotional (CU) traits contribute to the childhood behavioural disorders in children. Sample included 245 academically low performing children (mean age = 9.68; *SD* = 1.56) including 75 girls (mean age = 9.32; *SD* = 1.25) and 170 boys (mean age = 9.84; *SD* = 1.65). the age range of the sample was 7 to 13 years selected from 3rd to 5th grades, from various schools of Islamabad and Rawalpindi. The assessment of childhood behaviour disorder was made via Disruptive Behaviour Disorder (DBD) Rating scale (Urdu version) by (Loona & Kamal, 2011). Psychometric properties of ICU-P (Inventory of Callous-Unemotional Traits Urdu version) were determined in terms of alpha reliability, and inter scale correlations. Cronbach's alpha coefficients yielded an internal consistency coefficient of .75 for the 24 items of ICU-P (Urdu version). The alphas of ICU-P subscales were: .73, .78, .72 for Unemotional, Uncaring and Callousness subscales respectively. Multiple linear regression was carried out to examine the role of callous-unemotional traits as predictors of childhood behavior disorders. Findings indicated that callous and uncaring traits significantly predict disruptive behaviour disorders in children.

Key words: Callous-Unemotional Traits, Childhood behaviour disorders

Callous-Unemotional Traits (e.g., lack of guilt, absence of empathy, shallow and constrained emotions) have been hallmarks of conceptualization of adult psychopathology (Cleckley, 1976). In children, callous-unemotional (CU) traits might additionally contribute to the childhood behavioral disorders. This study investigated the role of CU traits in children screened out with behavior problems **via mothers' and teachers' ratings on** Disruptive Behaviour Disorder (DBD) rating scale. Callous-unemotional traits have been found to be closely associated with psychopathy. Goldstein et al., (1998) reported that behaviorally difficult children displaying these CU traits need a different kind of treatment than the behaviorally difficult children not showing these traits. This is in line with the findings of other community sample studies that have reported increasing levels of narcissistic and callous-unemotional traits with grade, and male children displaying more of these traits than female children (Frick et al., 2000).

The callousness factor depicted a dimension of behaviour that included a lack of empathy, guilt, and remorse for misdeeds. The second factor uncaring represented a dimension of behaviour that focused on a lack of caring about ones performance in tasks and for the feelings of other people. The third factor unemotional described a dimension of behaviour that focused on an absence of emotional expression (Frick et al., 2000).

The presence of CU traits has been shown to predict a more severe and chronic course of antisocial behaviour (Frick & Dickens, 2006) and may be a primary contributor to the higher rate of aggression and violence exhibited by this group (Frick & Marsee, 2006; Frick & Morris, 2004). Therefore, it was deemed necessary to assess Callous **Unemotional traits of children rated by mothers' and teachers' with childhood behaviour disorders**.

In the present Study, Inventory of Callous Unemotional Traits (Parent version) (ICU-P) (Frick, 2004) was translated into Urdu language. The diversity of the population worldwide shows a great need for cross-culturally validated instruments. Translation, adaptation and validation of a scale for cross-cultural research is time-consuming and requires careful planning and adoption of rigorous methodological approaches to devise a reliable and valid measure of the concept of interest for the target population (Sousa & Zauszniewski, 2011).

Harkness (2003) recommends the following five basic procedures for translation of an instrument: review of translation that produces different versions of the instrument, adjudication on which version to use, pretesting of the instrument and documentation of the problems encountered and decisions about solutions. Both of the proposed procedures, the back translation, and the committee approach, have one property in common: they are costly in terms of time.

Brislin (1986) has formulated various guidelines to enhance the quality of translation of an instrument, with emphasis on use of: short and simple sentences and avoidance of unnecessary words (unless redundancy is deliberately sought); the active rather than the passive voice

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use of (which is easier to comprehend); nouns instead of pronouns as the latter may have vague referents; for example, *you* may refer to a single individual or to a group of persons. Brislin further recommends that metaphors and colloquialisms, verbs and prepositions telling *where* and *when* that do not have a precise meaning, (*such as soon and often)* and possessive forms must be avoided if possible because it may be difficult to determine the ownership. Furthermore, the use of specific rather than general terms must be preferred.

The translation of ICU-P (Frick, 2004) was carried in accordance with the guidelines suggested by Brislin, (1986). Translation of ICU-P into Urdu will be highly useful for clinicians and researchers working with Pakistani population both at home and abroad. Moreover, present research will add a new psychological tool for screening Callous-Unemotional Traits in Pakistani children.

Objectives

Present study was designed with the following objectives:
1. To determine the role of callous unemotional traits as predictors of childhood behaviour disorders. Specifically in DBD children i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders on ICU-P (Frick, 2004).
2. Translation of Inventory of Callous Unemotional Traits (Parent Version) (ICU-P), devised by Frick (2004), consisting of 24-items into Urdu language
3. Establishing the psychometric properties of ICU-P, Urdu version.

To attain above mentioned objectives, following hypotheses were formulated.

Hypotheses

1. Callous-unemotional traits will predict childhood behaviour problems in academically low performing children.
2. Callous-unemotional traits will predict childhood behaviour problems in children with Disruptive Behaviour Disorder group of i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders.

Operational Definition of Variables

Variables of present study were defined as follows:

Callousness
Callousness represents dimension of behaviour that includes lack of empathy, guilt, and remorse for misdeeds (Essau, Sasagawa, & Frick, 2006).

Unemotional
Unemotional dimension of behavior refers to the absence of emotional expression (Essau et al., 2006).

Uncaring
Uncaring dimension of behaviour refers to a lack of caring about one's performance in tasks and for the feelings of other people (Essau et al., 2006).

Before testing hypothesis of present study, translation of Inventory of Callous Unemotional Traits (Parent version) (ICU-P) in Urdu language was carried out by completing the following procedure:

Phase I: Translation of Inventory of Callous Unemotional Traits (ICU-P) (Frick, 2004) 24-items into Urdu language.

Phase II: Selection of best translated items in Urdu Language by Committee of experts.

Phase III: Back translation of Urdu version of Inventory of Callous-Unemotional Traits (ICU-P) into English language.

Phase IV: Evaluation of the translated items by committee of experts and selection of most appropriate translated items to formulate Urdu version of inventory.

Phase V: Determination of psychometric properties of Inventory of Callous Unemotional Traits (ICU-P) (Frick, 2004).

Details of the five phases of Part I are mentioned in the subsequent section.

Phase I: Translation of Inventory of Callous Unemotional Traits (ICU-P) (Parent Version) (Frick, 2004) 24-items into Urdu language

Phase I consisted translating Inventory of Callous Unemotional Traits (ICU-P) (Frick, 2004) 24-items into Urdu language. The original scale in English language was given to nine bilinguals with complete understanding and knowledge of Urdu and English language. Bilinguals were instructed to translate every item of the scale from English into Urdu language without any change in the original scale. The qualification of bilinguals was M.Phil in Urdu, English, and Psychology.

Phase II: Selection of best translated items in Urdu Language by Committee of experts

The second phase consisted of expert evaluation of the content, grammatical structure, and wordings of the Urdu translated items by the committee of experts. Proficient committee members evaluated all translated items and selected best translated item for the next phase of Back translation. Item No 4, 5, 8, 9, 10, 11, 16, and 18 were

recommended to be translated again by the proficient committee members. Six new bilinguals with M.Phil in English and Psychology were approached again. Retranslated items were evaluated again and best translations were selected for back translation. The committee of experts in the present phase consisted of a Professor in National Institute of Psychology, Quaid-i-Azam University, Islamabad and two Ph.D Scholars. After completing the process of selection of the most appropriately translated Urdu items, these items were enlisted and given to the bilinguals for back translation.

Phase III: Back translation of Urdu translated Inventory of Callous Unemotional Traits (ICU-P) into English language

The third phase included Back Translation of the selected Urdu items of (ICU-P) (Frick, 2004) in English language. The Urdu translated list of items was given to nine bilinguals with M.Phil in Urdu and English literature. In the Back translation phase only those bilinguals were included who were unfamiliar with the content of items and they had not participated in the first phase of Urdu translation. Bilinguals were instructed to back translate all Urdu translated items into English language.

Phase IV: Evaluation of Back translated items by committee of experts

The back translated items of ICU-P were critically evaluated by a committee of experts consisting two Ph.D Scholars and a Professor doctor in National Institute of Psychology, Quaid-i-Azam University, Islamabad. After critical assessment of back translated items with reference to the context, and grammar selection of final items for ICU-P (Urdu version) was made. Since Back translation method is a standardized translation procedure it helped in assessing the accuracy of the translation.

Phase V: Determination of psychometric properties of ICU-P

Psychometric properties of ICU-P (Urdu version) were determined in terms of alpha reliability, and inter scale correlation.

Sample

Sample of present study included academically low performing children (N = 245; mean age = 9.68; SD = 1.56) including (girls: n = 75; mean age = 9.32; SD = 1.25) and (boys: n = 170; mean age = 9.84; SD = 1.65) within age range 7 to 13 years of age from 3rd to 5th grades. Inventory of Callous-Unemotional Traits (ICU-P) (Urdu version) (Frick, 2004) and Disruptive Behaviour Disorder (DBD) rating scale were presented to respective mothers (N = 245) of selected children through School administration.

Instrument

Inventory of Callous-Unemotional Traits (ICU-P) Inventory of Callous-Unemotional Traits (ICU-P) by (Frick, 2004) was based on the six items scale of the Antisocial Process Screening Device (APSD; Frick & Hare, 2001) that designate a distinct and important group of antisocial youth who show a number of characteristics associated with the construct of psychopathy. ICU-P was consisted of 24 items. Its subscales can be used for assessing Callousness (Item no 4, 8, 9, 18, 11, 21, 7, 20, 2, 10, 12), Uncaring (Item no 15, 23, 16, 3, 17, 24, 13, 5), and Unemotional traits (Item no 1, 19, 6, 22, 14). Items were scored on a 4-point Likert scale from (Not at all = 0) to (Definitely true = 3). Scores of first subscale of ICU-P i.e., Callousness can range from minimum 0 to maximum 33, scores of second subscale i.e., Uncaring can range from minimum 0 to maximum 24, and scores of Unemotional subscale of ICU-P can range from minimum 0 to maximum 15.

Disruptive Behaviour Disorder (DBD) Rating scale (Urdu Version). DBD Rating scale (Urdu version) (Loona & Kamal, 2011) is 42 items scale that can be rated by Parents and Teachers to assess Attention-Deficit/Hyperactivity Disorder, including Inattention, and Hyperactivity/impulsivity, Oppositional Defiant Disorder, and Conduct Disorder. Cronbach alpha reliability coefficients yielded an internal consistency coefficient of .94 for the entire 42 items. Cronbach's alpha coefficients ranged from .80 to .91 for the four subscales of DBD Rating Scale (Urdu version). The alpha of subscales of DBD rating scale (Urdu version) were as follows, ADHD-I (α = .85), ADHD-HI (α = .80), ADHD-C (α = .86), ODD (α = .84), and CD (α = .91).

Procedure

Inventory of Callous-Unemotional Traits (ICU-P) and DBD Rating scale (Urdu version) by Loona and Kamal (2011) along with Informed consent was presented to respective mothers of academically low performing children within age range 7 to 13 years from grade 3rd to 5th. Complete instructions about filling up the scale were mentioned. Most of the mothers took keen interest in filling up the form and found no difficulty in understanding items.

Results

For determination of reliability of Urdu Version of Inventory of Callous-Unemotional Traits (ICU-P) and its subscales, Cronbach alpha reliability coefficients and interscale correlations were performed.

Table 1
Alpha Reliability Coefficients of Total and Subscales of ICU-P (N = 245)

Subscales	No. of Items	Alpha Coefficients (Urdu version)	Alpha Coefficients (English version)
Unemotional	5	.73	.64
Uncaring	8	.78	.73
Callousness	11	.72	.70
Total ICU-P	24	.75	.77

Note. (Source for ICU English version, Essau, Frick, & Sasagawa, 2006)

In Table 1 showed Cronbach's alpha coefficients yielded an internal consistency coefficient of .75 for the 24 items of ICU-P (Urdu version). Cronbach's alpha coefficients ranged from .72 to .78 for the three subscales of ICU-P (Urdu version). The alphas of ICU-P subscales were as follows, **Unemotional (α = .73), Uncaring (α = .78), Callousness (α = .72).** All subscales and total alpha reliability was satisfactory that indicated internal consistency of the scale.

Table 2
Interscale Correlation Coefficients, Means, and Standard Deviations of Inventory of Callous Unemotional Traits (ICU-P) (N = 245)

Subscales	1	2	3	4
Unemotional	-			
Uncaring	.02	-		
Callousness	.13*	.26**	-	
Total ICU-P	.66**	.70**	.55**	-
M	8.14	12.59	10.22	30.95
SD	2.52	4.95	5.02	8.21

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

Findings of Table 2 indicated interscale correlation coefficients, means, and standard deviations of total and subscales of ICU-P. The internal consistency of ICU-P was further determined by calculating interscale correlation among total and subscales of ICU-P. There was a positive and significant interscale correlation between subscales i.e., unemotional, uncaring, and callousness with total ICU. Findings indicated that the three subscales were moderately inter correlated. However, uncaring and unemotional subscales showed nonsignificant interscale correlation.

Table 3
Multiple Linear Regression Analysis for assessing Callous Unemotional Traits as predictor of childhood behaviour problems (N = 245)

Variables	B	B	t	p	95% CI LL UL
(Constant)	122.08*		11.22	.000	[100.66, 143.51]
Callous	1.60*	.184	3.04	.003	[.565, 2.64]
Uncaring	-2.86*	-.322	-5.19	.000	[-3.94, 1.75]
Unemotional	-.35	-.021	-.32	.74	[-2.50, 1.78]
R^2	.138				
F	12.81**			.000	

ΔR^2	.127

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 3 showed callous and uncaring traits significantly predicted childhood behaviour problems. So hypothesis no. 5 that callous unemotional traits will predict childhood behaviour problems in academically low performing children proved significant for callous and uncaring traits. As per literature children having callous unemotional traits and behaviour disorders at the same time are at increased of developing adult psychopathology.

Table 4
Multiple Linear Regression Analysis for assessing Callous Unemotional Traits as predictor of childhood behaviour problems (N = 165)

Variables	B	B	t	p	95% CI LL UL
(Constant)	131.73		12.09	.000	[100.22, 153.23]
Callous	.95	.14	1.86	.06	[-.05, 1.96]
Uncaring	-1.73*	-.24	-3.14	.002	[-2.83, -.64]
Unemotional	.01	.001	.01	.99	[-2.21, 2.23]
R^2	.08				
F	4.69**			.004	
ΔR^2	.06				

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 4 showed that uncaring traits significantly predicted childhood behaviour problems in children screened out with disruptive behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders. So hypothesis no. 6 that callous unemotional traits will predict childhood behaviour problems in children screened out with disruptive behaviour disorders proved significant only for uncaring subscale. As per literature children having callous unemotional traits and behaviour disorders at the same time are at increased risk of developing adult psychopathology.

Discussion

Present research was planned to study callous unemotional (CU) traits in children with childhood behaviour disorders. CU traits refer to a specific affective (e.g., absence of guilt, constricted display of emotions) and interpersonal **(e.g., failure to show empathy, use of others for one's own gain)** style that is characteristic of a subgroup of children with severe conduct problems (Christian, Frick, Hill, Tyler, & Frazer, 1997; Frick, Barry, & Bodin, 2000; Frick, O'Brien, Wootton, & McBurnett, 1994).

The presence of CU traits may designate a particularly severe and aggressive pattern of conduct problems (Christian et al., 1997; Lynam, 1997) and it may enhance the prediction of later delinquency (Brandt et al., 1997; Forth et al., 1990; Toupin et al., 1995). The predictive utility of these traits has been one of the most clinically useful aspects of the construct of psychopathy in research on antisocial adults (Hare, 1998; Hart & Hare, 1997) but such utility has not been extensively tested in youth (Edens et al., 2001).

For studying CU traits, Inventory of Callous Unemotional Traits (Parent version) was translated into Urdu language by following the standardized procedure of forward and back translation. After critical assessment of back translated items with reference to the context, and grammar selection of final items for ICU-P (Urdu version) was made. Alpha reliability coefficients for the ICU-P (Urdu version) were determined; findings of Table 1 indicated satisfactory reliabilities thus indicating internal consistency of ICU-P (Urdu version). The alphas of ICU-P (Urdu version) were as follows, unemotional (α = .73), uncaring (α = .78), and callousness (α = .72).

As per literature children having callous unemotional traits and behaviour disorders at the same time are at increased risk of developing adult psychopathology. Therefore, multiple regression analysis was performed to assess role of callous unemotional traits in prediction of childhood behaviour disorders on the overall sample ($N = 245$). Findings of Table 3 showed callous and uncaring traits significantly predicted childhood behaviour problems. So hypothesis no. 1 that callous unemotional traits will predict childhood behaviour problems in academically low performing children proved significant. However, unemotional traits proved nonsignificant in predicting childhood behaviour disorders.

Moreover, present study also evaluated role of callous unemotional traits in prediction of childhood behaviour disorders on children screened out with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders ($N = 165$). Findings of Table 3 showed that uncaring traits significantly predicted childhood behaviour problems. So hypothesis no. 2 that callous unemotional traits will predict childhood behaviour problems in children screened out with disruptive behaviour disorders proved significant only for uncaring subscale.

Findings of present study will prove helpful in understanding the presence of callous unemotional traits in children with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders. These findings will also prove helpful for the practicing clinicians and child psychologists to assess this area. In case of presence of callous unemotional traits, clinicians must implement a suitable treatment that can facilitate these children and protect them from the risk of adult psychopathy. Moreover, Inventory of Callous Unemotional

Traits (ICU-P) (Urdu version) will prove useful for assessing callous unemotional traits in children in Pakistan.

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