

CROSS LANGUAGE VALIDATION OF URDU VERSION OF CLINICIAN-ADMINISTERED PTSD SCALE (CAPS-5)

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ABSTRACT

Objective: This study was aimed to assess the test-retest reliability of the Urdu translated version of CAPS-5 using the data of 140 survivors who experienced life threatening trauma in the previous month.

Material and Methods: The assessments were carried out at two different times, initial assessment (Time 1) was performed 01 month after trauma and the second assessment (Time 2) was done 15 days after initial administration. The data was collected from a public hospital, Pakistan Institute of Medical Sciences (PIMS) in the month of December 2018.

Result: Cross language and test re-test reliability were assessed, high stability in correlation and coefficient between two scores were seen in two different versions (English and Urdu) over in two different times.

Conclusion: Alpha reliability of 20 items of CAPS-5 .94- .92, and .93 to .62 for each symptom indicate satisfactory of Urdu version. However, the internal consistency is little higher than original English version .88 and test re-test reliability .83.

Key words: Test-retest Reliability, Cross Language Validation, PTSD, CAPS-5.

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INTRODUCTION

The Clinician-Administered PTSD Scale (CAPS) is a comprehensive diagnostic instrument generally used for the diagnosis and assessment of PTSD. It can be used by trained professionals, researchers, and clinicians, and it takes 45-60 minutes to administer. It is considered a good tool for assessment and diagnosis of PTSD¹. The CAPS has some advantages over other instruments. Firstly, it is used for assessment of PTSD symptoms base on single severity scores. Secondly, it is also used to assess the intensity and frequency of PTSD symptoms. Finally, it is structured interview consists of highly standardized probing questions. The key advantage of CAPS-5 on other diagnostic tools is that, it assesses the intensity and frequency of PTSD symptoms on five-point rating scale, ranging from (0-4). It provides a comprehensive detail of PTSD symptoms and helps in administration and scoring through uniform and careful way by using rating scale.

The diagnostic criteria of CAPS-5, including crite-

rion A, B, C, D, E, F and G. The criteria "A" was responsible for measurement and assessment of trauma. The first 20 items of the scale from B-1 to E-20, assessed the PTSD symptoms, while the other 10 items assess different functional symptoms such as onset and duration of symptoms, subjective distress and impairment global validity, global improvement, and dissociative subtype. The CAPS-5 items were rated from 0-4 severity level, labeled absent, mild, moderate, and extreme. The additional criteria of CAPS-5 relate to traumatic events, 1-8 and items no 10 responsible for traumatic events which assess the PTSD symptoms which may or may not be to current trauma. For this, rating scale definite, probable and unlike are used. Definite attributed to trauma index, probable means that the PTSD symptoms may or may not attribute to trauma, while unlike is responsible that PTSD symptoms are not attributed to the trauma index.

There is extensive literature that shows that translation of CAPS has been done in different languages, including Cambodian², Bosnian³, Farsi^{4,5}, Croatian⁶, Dutch⁷, German⁸, Japanese⁹, Portuguese¹⁰, Spanish¹¹, Swedish¹², Turkish¹³. It has been observed that different translation mostly used for non-English speaker. It has been realized to translate CAPS-5 should be translate into Urdu Language. The aim of the current study was to assess the test and retest reliability of the Urdu version of CAPS-5. For this purpose, total 140 sample of trauma survivors were taken from hospital.

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MATERIAL AND METHODS

The total study sample consists of 140 patients with a history of trauma age older than 18 years. They were bilingual consist of both male and female participants. Data was collected from out-door patients who had history of life threatening trauma. In the first phase the interview was taken from trauma survivors after one month of using both Urdu and English version of scale. In second phase CAPS-5 was administered after 15 days of initial administration. Mild and moderate trauma experienced individuals included whereas, individuals with history of a severe trauma were excluded. Statistically analysis was used for interpretation of data. The CAPS-5 was administered in four diverse setting such as English test, retest Urdu test, retest, English test, Urdu retest, Urdu test and English retest. The translation was done as mentioned in the next sections.

STEP- 1: FORWARD TRANSLATION

In this step four bilingual experts were invited for translation CAPS-5. They were requested to translate CAPS-5 PTSD scale from original English version to Urdu language. All experts were instructed to translate word by word item of a the scale from English to Urdu independently. They were also informed about the goal and objectives of translation.

STEP-II: REVIEWING THE FORWARD TRANSLATION

After forward translation, a committee of experts was formed in order to review the forward translation. They are requested to take part in review processes, discuss and make a valuable suggestion on forward translation. They were asked to compare the Urdu translation of the Clinician Administered PTSD Scale (CAPS-5) to original Version (English). Further, they were also asked to read the items carefully, and advise some valuable suggestions, recommendations about grammar, style and words.

STEP III: REVIEWING THE TRANSLATED VERSION THROUGH COMMUNITY SAMPLE

In this step, a focus group discussion (FGDs) was conducted at the community level. Two FGDs were arranged with each group consisting of 08 members. Total time for each FGDs was one hour and the participant were instructed to read all items carefully and provide feedback about clarity and understandability. After which changes suggested by both groups were incorporated with each other.

STEP IV: BACK TRANSLATION

In this step, Urdu version of CAPS-5 was translated into English. The translation processes were carried out by bilingual experts. They were not aware of the original

English version. The purpose of back translation was to verify the translation. The same procedure was followed as adopted in forward translation. The back translation was examined by same committee members who had examined the forward translation.

STEP V: COMMITTEE APPROACH

A multi-disciplinary committee was formed, whose purpose was to evaluate wording style, grammar and content critically. They were asked to assess the back translation and Urdu translation of CAPS-5.

STEP VI: TEST THE PSYCHOMETRICS OF PRE-FINAL URDU VERSION

Urdu translated version of CAPS-5 was applied to bilingual individuals who had a history of mild and moderate trauma, and the data was collected after a month of trauma.

STEP VII. SUBMISSION TO DEVELOPER

After using the processes of translation adaptation, the final version of Urdu and back translation (English) were send back to author (National Centre for PTSD).

RESULT

The demographic characteristics of study population are presented in table 1. The cross-language validation, test re-test reliability and correlation between two scores were carried out in two different times, the gap between time-1 and time -2 was 15 days. High constancy was observed in correlation and coefficient between two scales over different times see table 2 and 3 for details.

Table 1: Demographic characteristics of the study variables (N=140).

Variables	N	%
Gender		
Male	70	50
Female	70	50
Marital Status		
Married	90	64.29
Unmarried	50	35.71
Age		
18-40 Year	91	65.00
41-55 Year	33	23.57
Above 55 Year	16	11.42
Education		
F.A/FSc	85	60.71
Graduation/Above	55	39.29
Profession		
Employed	66	47.14
Unemployed	74	52.85

Table 2: Alpha reliability of English and Urdu Versions (CAPS-5) at Time-1 and Time-2.

Scales	Time 1		Time 2	
	Urdu (n = 70)	English (n = 70)	Urdu (n = 70)	English (n = 70)
PTSD(20)	.91	.91	.92	.91
Intrusive Symptoms (5)	.92	.72	.76	.83
Avoidance Symptom (2)	.75	.62	.63	.71
Negative Cognition (7)	.91	.81	.82	.83
Hyper arousal (6)	.85	.77	.84	.81

Table 3: Test, retest reliability of English and Urdu Version of CAPS-5 and its sub-scales (N=140).

Scales	UU (n=35)	UE (n=35)	EE (n=35)	EU (n=35)
PTSD	.96**	.93**	.91**	.91**
Intrusive Symptoms	.85**	.83**	.68**	.72**
Avoidance Symptom	.73**	.77**	.72**	.62**
Negative Cognition	.90**	.91**	.75**	.81**
Hyper arousal	.91**	.94**	.82**	.75**

DISCUSSION

It has been realized that increasing the research publication in the area of traumatic stress and research being conducted in Urdu speaking area, it is important to provide a valid Urdu translated assessment tool in the field of psycho- traumatology. To the best of our information, this current study provides valid data on psychometric properties about Urdu translated CAPS-5 PTSD scale.

Alpha reliability of 20 items of CAPS-5 .94- .92, and .93 to .62 for each symptom indicate satisfactory results of Urdu version. However, the internal consistency is little higher than original English version .88 and test re-test reliability .83 which is obtained from two sample of military veterans (N=165)¹⁴. The original study was conducted on military veterans, while the current study the sample was taken of individual with a history of accidental trauma. It has been observed that there is growing exposure to trauma and the prevalence of PTSD in developed countries like US and UK, whereas, prevalence and exposure to trauma is more in developing countries like Pakistan¹⁵. Local Native psychologist realized to translate the CAPS-5 from original (English) to national language Urdu in order to administered Urdu version into local affected populations. The objective of present study was to translate CAPS-5 to locally used language which would help in assessing the PTSD symptoms in Pakistani society

and culture. Though, the CAPS-5 PTSD scale had good test retest reliability across all individuals with a history of life threatening trauma. Cross-culturally reliable and valid tools may provide help in assessing the diverse issues of people throughout the world¹⁶. The findings of the current study is the link with previous study on CAPS translation in different languages. The past study about adaption of the translated in German language⁸ provided structural support to an instrument. It has been found that CAPS-5 and its sub-scale has a reasonable equivalent across different nations and cultures.

The study had a number of limitations, firstly the scale was administered to accidental trauma of mild and moderate injury patients while ignoring the individuals with a severe history of injury. Secondly, the CAPS-5 was applied to the small sample of population with history of physical trauma. Thirdly we did not control the cultural and other physical and psychiatric disorders.

CONCLUSION

The study concluded that there was a high constancy in correlation and coefficient between two scales of clinician-administered PTSD Scale: CAPS-5 over two different times.

RECOMMENDATION

Further research is needed with a larger sample size and minimizing the confounding variables to further validate the scale.

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REFERENCES

1. Weathers FW, Keane TM, Davidson JR. Clinician-Administered PTSD Scale: A review of the first ten years of research. *Depression and anxiety*. 2001;13(3):132-56.
2. Hinton DE, Chhean D, Pich V, Pollack MH, Orr SP, Pitman RK. Assessment of posttraumatic stress disorder in Cambodian refugees using the Clinician-Administered PTSD Scale: Psychometric properties and symptom severity. *J Trauma Stress: Official Publication of The International Society for Traumatic Stress Studies*. 2006;19(3):405-9.
3. Charney ME, Keane TM. Psychometric analyses of the Clinician-Administered PTSD Scale (CAPS)--Bosnian Translation. *Cultural Diversity and Ethnic Minority Psychology*. 2007;13(2):161.
4. Malekzai ASB, Niazi JM, Paige SR, Hendricks SE, Fitzpatrick D, Leuschen MP, et al. Modification of CAPS-1 for diagnosis of PTSD in Afghan refugees. *J Trauma Stress*. 1996;9(4):891-8.
5. Renner W, Salem I, Ottomeyer K. Cross-cultural validation of measures of traumatic symptoms in groups of asylum seekers from Chechnya, Afghanistan, and West

- Africa. Social Behavior and Personality: an international journal. 2006 Jan 1;34(9):1101-14.
6. Priebe S, Gavrilovic JJ, Matanov A, Franciskovic T, Knezevic G, Ljubotina D, et al. Treatment outcomes and costs at specialized centers for the treatment of PTSD after the war in former Yugoslavia. *Psychiatric Services*. 2010;61(6):598-604.
 7. Hovens J, Van der Ploeg H, Bramsen I, Klaarenbeek M, Schreuder J, Rivero VV. The development of the self-rating inventory for posttraumatic stress disorder. *Acta Psychiatrica Scandinavica*. 1994;90(3):172-83. Schnyder U, Moergeli H. German version of clinician-administered PTSD scale. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies*. 2002;15(6):487-92.
 8. Asukai N. Psychometric properties of the Japanese-language version of the Clinician-Administered PTSD Scale for DSM-IV. *Jpn J Trau Stress*. 2003;1:47-53.
 9. Pupo MC, Jorge MR, Bressan RA, Andreoli SB, Mello MF, de Jesus Mari J. The accuracy of the Clinician-Administered PTSD Scale (CAPS) to identify PTSD cases in victims of urban violence. *Psychiatry research*. 2011;185(1-2):157-60.
 10. Rendon MJ. The cultural adaptation of the clinician-administered PTSD Scale for Spanish-speaking Latinos with limited English proficiency in the United States (Doctoral dissertation, University of Miami).
 11. Paunović N, Öst LG. Psychometric properties of a Swedish translation of the Clinician-Administered PTSD Scale-Diagnostic Version. *J trauma stress*. 2005;18(2):161-4.
 12. Aker A, Ozeren M, Basoglu M, Kaptanoglu C, Erol A, Buran B. The Turkish version of Clinician-administered PTSD Scale for DSM-IV: A study of its reliability and validity. *Turkish J Psychiatry*. 1999;10:286-93.
 13. Weathers FW, Bovin MJ, Lee DJ, Sloan DM, Schnurr PP, Kaloupek DG, et al. The Clinician-Administered PTSD Scale for DSM-5 (CAPS-5): Development and initial psychometric evaluation in military veterans. *Psychological Assessment*. 2018;30(3):383.
 14. Hyder, Razzak JA. The challenges of injuries and trauma in Pakistan: an opportunity for concerted action. *Public health*. 2013;127(8):699-703.
 15. Sousa VD, Rojjanasrirat W. Translation, adaptation and validation of instruments or scales for use in cross-cultural health care research: a clear and user-friendly guideline. *J evaluation in clinical practice*. 2011;17(2):268-74.

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AUTHOR'S CONTRIBUTION

Following authors have made substantial contributions to the manuscript as under

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|-----------------|--|
| Zaman S: | Research design, data collection, data analysis and manuscript writing |
| Arouj K: | Proof Reading, analysis and final approval |
| Irfan S: | Editing manuscript, analysis and manuscript writing. |

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.