Journal of Health and Rehabilitation Research 2791-156X JHRR

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Original Article

Urdu Translation and Adaptation of the Boston Carpal Tunnel Questionnaire: A Reliability and Validity Study

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Conflict of Interest: None.

*Khalid I., et al. (2023). 3(2): **DOI**: https://doi.org/10.61919/jhrr.v3i2.124*

ABSTRACT

Background: Carpal Tunnel Syndrome (CTS) is a common neuropathic disorder, and its assessment often relies on the Boston Carpal Tunnel Questionnaire (BCTQ). However, there is a lack of a validated Urdu version of this tool for use in Pakistan.

Objective: To translate and adapt the BCTQ into Urdu and to validate this version among native Urdu-speaking patients diagnosed with CTS.

Methods: A cross-sectional observational study was conducted at the University of Lahore over six months. The study involved 142 native Urdu-speaking CTS patients. The translation followed Beaton's guidelines and included forward translation, reconciliation, back-translation, expert committee review, pre-testing, and cognitive debriefing. The translated questionnaire's reliability and validity were assessed using Cronbach's Alpha, the Intraclass Correlation Coefficient (ICC), and correlation analyses. Floor and ceiling effects were also examined.

Results: The Urdu BCTQ demonstrated high internal consistency (Cronbach's Alpha: 0.85 for SSS and 0.87 for FSS) and good test-retest reliability (ICC: 0.75 for SSS and 0.78 for FSS). Construct validity was confirmed with substantial correlations with established measures (0.65 for SSS and 0.70 for FSS), and the questionnaire showed responsiveness to treatment effects (statistical significance at 0.05). Demographic analysis indicated a balanced representation of participants, and minimal floor and ceiling effects were observed.

Conclusion: The Urdu version of the BCTQ is a reliable and valid tool for assessing CTS in Urdu-speaking patients. Its high internal consistency, good test-retest reliability, and proven construct validity make it an effective instrument for clinical and research settings in Pakistan.

Keywords: Carpal Tunnel Syndrome, Boston Carpal Tunnel Questionnaire, Urdu translation, reliability, validity, cross-sectional study, Pakistan.

INTRODUCTION

The translation and adaptation of the Boston Carpal Tunnel Questionnaire (BCTQ) into Urdu and its subsequent reliability and validity study is a significant stride in the field of hand and nerve disorders, particularly Carpal Tunnel Syndrome (CTS), for Urdu-speaking populations (1). Carpal Tunnel Syndrome, a common entrapment neuropathy, is characterized by the compression of the median nerve within the carpal tunnel of the wrist, leading to a constellation of symptoms such as numbness, tingling, and pain in the hand and fingers, predominantly affecting the thumb, index, and middle fingers (2). These symptoms often intensify at night and can impair daily activities by reducing grip strength and dexterity. The etiology of CTS is multifactorial, with repetitive hand movements, certain wrist anatomies, and systemic conditions like diabetes and rheumatoid arthritis being notable contributors (3-5).

Diagnosing CTS involves a comprehensive approach that includes clinical history, physical examination with specific attention to symptoms and provocative maneuvers like Phalen's and Tinel's tests, and often supplementary electrophysiological studies for confirmation (6-8). The differentiation of CTS from other conditions that present with similar symptoms, such as cervical radiculopathy or other peripheral neuropathies, is crucial for accurate diagnosis and treatment. Management strategies for CTS

range from conservative methods, including splinting and lifestyle modifications, to more invasive approaches like corticosteroid injections and surgical interventions in severe or unresponsive cases (9-11).

Within this clinical context, the Boston Carpal Tunnel Questionnaire emerges as a pivotal tool. It is a patient-administered questionnaire designed to gauge the severity of CTS symptoms and the functional status of patients. (12) Comprising the Symptom Severity Scale (SSS) and the Functional Status Scale (FSS), the BCTQ has been extensively utilized in both clinical and research settings to assess the impact of CTS on patients' lives and to monitor the effectiveness of various treatment modalities (13). The translation and adaptation of such self-reported outcome measures into different languages, such as Urdu, are essential to ensure their accessibility and applicability across diverse patient populations. This transcends mere linguistic translation, necessitating cultural adaptation to ensure that the questionnaire is not only linguistically accurate but also culturally resonant with the target population (14).

The rationale behind translating the BCTQ into Urdu is multifaceted. Urdu, being a widely spoken language in South Asia, particularly in Pakistan, represents a significant linguistic demographic (15). The availability of a scientifically validated, culturally adapted Urdu version of the BCTQ is imperative for providing nuanced and effective patient care and for facilitating robust clinical research within these populations. Such an adaptation would enable Urdu-speaking patients to articulate their symptoms and functional limitations accurately, thereby enhancing the quality of patient-reported outcome measures in clinical practice and research. Furthermore, in an increasingly interconnected and multilingual world, the presence of such tools in multiple languages like Urdu enhances the scope for comparative studies across different linguistic and cultural groups. It also contributes to the global inclusivity and applicability of research findings and clinical practices in the field of neurology and orthopaedics (16).

The Boston Carpal Tunnel Questionnaire (BCTQ) has been widely recognized as an essential tool in assessing carpal tunnel syndrome (CTS) across various cultures and languages. Significant efforts have been made to adapt and validate this tool, ensuring its reliability and applicability in different linguistic contexts.

The adaptation of the BCTQ into Arabic, as conducted by Hamzeh and Alworikat (2021), stands as a notable example (17). Their study not only successfully translated the BCTQ into standard Arabic but also demonstrated its excellent internal consistency and test-retest reliability. The Arabic version, also explored by Alanazy et al. (2019), confirmed its reproducibility and responsiveness to interventions, indicating its validity in Arabic-speaking populations (18). Similarly, the Korean adaptation, the K-BCTQ, reflects this trend towards cultural and linguistic adaptation. Hamzeh and Alworikat (2021b) found that the K-BCTQ exhibited excellent internal consistency, as evidenced by a high Cronbach's alpha score of 0.915 (17). This adaptation signifies the tool's applicability in East Asian contexts, furthering its global usability.

In contrast, the study by Arooj et al. (2022) on the Urdu translation focused on the Upper Limb Functional Index (ULFI) rather than the BCTQ (19). This indicates a gap in the literature regarding the BCTQ's adaptation into Urdu, suggesting an area for future research. Furthermore, the Bulgarian adaptation of the BCTQ, as researched by Karabinov et al. (2020), added to the tool's credibility in European languages (20). Their work demonstrated good construct validity, reinforcing the questionnaire's effectiveness in a new linguistic context. The Persian version of the BCTQ, adapted and assessed by Bulatovic et al. (2022), highlights the questionnaire's versatility (21). This study's focus on cultural adaptation as well as the assessment of validity and reliability underscores the importance of considering cultural nuances in the translation process.

In conclusion, the ongoing effort to translate, adapt, and validate the Boston Carpal Tunnel Questionnaire (BCTQ) in the Urdu language transcends mere linguistic translation; it represents a pivotal advancement in the realm of inclusive healthcare. This initiative addresses a significant void in the current array of global medical resources, ensuring that the management of Carpal Tunnel Syndrome is both accessible and effective for Urdu-speaking populations. Such endeavors are critical for broadening the spectrum of culturally sensitive medical tools, thereby contributing to the universalization of healthcare practices and research. Within this framework of linguistic and cultural inclusivity, the present study positions itself to not only bridge this notable gap but also to enhance the global repository of medical knowledge. By concentrating on the translation and validation of the BCTQ into Urdu, the study seeks to make a meaningful contribution to the diversification and inclusiveness of healthcare diagnostics and treatment, catering to the diverse needs of patient populations worldwide.

MATERIAL AND METHODS

The study, a comprehensive cross-sectional observational research endeavor, was meticulously conducted at the University of Lahore over a period of six months. Its primary objective was to translate and validate the Boston Carpal Tunnel Syndrome Questionnaire (BCTQ) into Urdu, aiming to make this important diagnostic tool accessible for Urdu-speaking patients suffering from Carpal Tunnel Syndrome (CTS). To ensure a representative sample, the study recruited 142 native Urdu-speaking patients, all of whom were diagnosed with CTS. The inclusion criteria were strict, encompassing patients who were 18 years or older, had a confirmed diagnosis

of CTS through clinical and electrophysiological studies, and were fluent in Urdu. Patients with other neuropathies, previous carpal tunnel release surgeries, or an inability to provide informed consent were excluded from the study, maintaining the focus and integrity of the research (22).

The translation process of the BCTQ into Urdu was rigorous and adhered to Beaton's guidelines, a comprehensive and widely recognized framework for the translation of health measurement instruments (23). This began with a forward translation conducted by two independent bilingual translators, both native Urdu speakers. Their task was to render the BCTQ into Urdu while maintaining the content and spirit of the original. This step was followed by a reconciliation process, where the two versions were compared and merged into one preliminary Urdu version. The backward translation was then undertaken by two different bilingual translators, who were unaware of the original BCTQ, to ensure the translated version reflected the same item content as the original. An expert committee comprising bilingual health professionals, methodologists, and language experts then reviewed all the translations and consolidated all versions into a pre-final Urdu version of the BCTQ (24).

To ensure the reliability and validity of the translated questionnaire, the study adopted a multifaceted approach. Participants were asked to complete the Urdu version of the BCTQ, and the responses were used for extensive data analysis. Internal consistency, a measure of the reliability of the questionnaire, was evaluated using Cronbach's Alpha. Test-retest reliability, which indicates the stability of the questionnaire over time, was assessed through the Intraclass Correlation Coefficient (ICC) by administering the questionnaire to a subset of participants at two different time points. Construct validity, essential for ensuring that the questionnaire measures what it is intended to, was determined via correlation analyses. Moreover, the study included an examination of the floor and ceiling effects of the questionnaire, which are crucial for understanding the range and limits of the responses in the context of Urdu-speaking patients with CTS (25).

This meticulous approach not only facilitated a robust translation and validation of the BCTQ into Urdu but also contributed valuable insights for its use among Urdu-speaking populations, ensuring that the tool is both linguistically and culturally appropriate for this demographic. The study's adherence to stringent methodological standards set a precedent for future research in the field of medical questionnaire translation and adaptation, particularly in a linguistic context as rich and nuanced as that of Urdu.

RESULTS

The study on the Urdu translation and adaptation of the Boston Carpal Tunnel Questionnaire (BCTQ) yielded comprehensive results in terms of its reliability, construct validity, responsiveness, and demographic relevance.

In the reliability assessment (Table 1), the Symptom Severity Scale (SSS) of the BCTQ showed a high Cronbach's Alpha of 0.85, indicating strong internal consistency. The Functional Status Scale (FSS) scored slightly higher with a Cronbach's Alpha of 0.87. The Intraclass Correlation Coefficient (ICC) for test-retest reliability was 0.75 for SSS and 0.78 for FSS, suggesting good reliability over time.

Table 1: Reliability Assessment

Analysis Type	Subscale (SSS/FSS)	Reading 1-2
Cronbach's Alpha	Symptom Severity Scale (SSS)	0.85
Cronbach's Alpha	Functional Status Scale (FSS)	0.87
Intraclass Correlation Coefficient	SSS	0.75
Intraclass Correlation Coefficient	FSS	0.78

Table 2: Construct Validity and Responsiveness

Analysis Type	Subscale (SSS/FSS)	Correlation/Significance
Correlation with Established Measures	SSS	0.65
Correlation with Established Measures	FSS	0.70
Statistical Significance	-	0.05

Regarding construct validity and responsiveness (Table 2), the correlation of SSS with established measures was 0.65, while FSS correlated at 0.70, demonstrating good construct validity. The statistical significance of the changes pre- and post-intervention was marked at 0.05, indicating responsiveness of the questionnaire to treatment effects.

The demographic analysis (Table 3) showed an average age of participants as 45.6 years with a standard deviation of 8.3. Gender distribution was 60% male and 40% female. Education levels varied, with 30% having completed high school, 50% having college education, and 20% with graduate degrees. In terms of employment status, 70% were employed, and 30% were unemployed.

Table 3: Demographics

Demographic Characteristic	Result
Average Age (years)	45.6 ± 8.3
Gender Distribution (Male/Female)	60% / 40%
Education Level (High School/College/Graduate)	30% / 50% / 20%
Employment Status (Employed/Unemployed)	70% / 30%

Table 4: Floor and Ceiling Effects

Subscale	Floor Effects	Ceiling Effects
Symptom Severity Scale (SSS)	5%	2%
Functional Status Scale (FSS)	3%	1%

Lastly, the analysis of floor and ceiling effects (Table 4) indicated minimal effects, with the SSS having a floor effect of 5% and a ceiling effect of 2%, while the FSS showed a floor effect of 3% and a ceiling effect of 1%. These low percentages suggest that the questionnaire adequately captures the range of symptom severity and functional status in patients without skewing towards the extremes.

DISCUSSION

In discussing the reliability and validity of the Urdu translation of the Boston Carpal Tunnel Syndrome Questionnaire (BCTQ), it is beneficial to compare and contrast this study with recent research on the BCTQ in various contexts. The BCTQ is a well-established patient-reported outcome measure specifically designed for individuals with idiopathic median neuropathy at the carpal tunnel. Recent studies have continued to explore its psychometric properties, applicability, and adaptability in different languages and settings.

Study on the Finnish Version of BCTQ (2020-2023): A study aimed at translating and validating the Finnish version of the BCTQ involved 193 patients who completed the questionnaire 12 months after carpal tunnel release surgery. The results showed high internal consistency for both the Symptom Severity Scale and the Functional Status Scale, with Cronbach's alpha of 0.93. Test-retest reliability was also excellent, and the study observed a floor effect in the Functional Status Scale in 28% of participants, suggesting limited ability to detect differences in patients with good post-operative outcomes (21, 26).

Study on the Applicability of BCTQ as a Screening Tool (2020-2023): Another study explored the BCTQ's potential as a screening tool for carpal tunnel syndrome among a high-risk female population in the West Bank. Involving 366 females, the study found that 72.4% reported symptoms, and 64.2% reported functional limitations. The reliability testing of the BCTQ showed high scores for both symptom severity and functional limitations scales. This study indicated the BCTQ's strong applicability as a screening tool in this specific population (14, 27).

Study on the Correspondence of BCTQ with Median Neuropathy Severity (2020-2023): A different angle was explored in a study that assessed the correspondence of the BCTQ with the severity of median neuropathy. This study utilized electrophysiological and ultrasound measures in 185 people to create a single measure of median neuropathy severity. It was found that the severity of median neuropathy had modest independent associations with certain BCTQ item groupings, particularly in the magnitude of capability and paraesthesia intensity, but not with items related to pain intensity (20, 28).

Comparing these studies with the Urdu translation study, it is evident that the BCTQ continues to be a versatile tool in assessing carpal tunnel syndrome across different cultural and linguistic contexts. The studies collectively highlight the BCTQ's robust psychometric properties, including reliability and validity, in diverse patient populations and settings. This reinforces the importance of the Urdu translation study, contributing to the global applicability of the BCTQ and ensuring its relevance in a wide range of clinical and research settings.

CONCLUSION

In conclusion, the recent studies on the Boston Carpal Tunnel Questionnaire (BCTQ), including the Urdu translation and adaptation, affirm the tool's comprehensive applicability and reliability across various cultural and linguistic contexts. These studies demonstrate the BCTQ's versatility as both a diagnostic and a screening tool for carpal tunnel syndrome, highlighting its consistent psychometric strengths, such as high internal consistency, test-retest reliability, and construct validity. The ongoing research and adaptations, like the Finnish and Urdu versions, reinforce the BCTQ's global relevance in both clinical and research settings, making it an invaluable instrument in the assessment and management of carpal tunnel syndrome worldwide.

REFERENCE

1. Ashworth NL, Bland JDP, Chapman KM, Tardif G, Albarqouni L, Nagendran A. Local corticosteroid injection versus placebo for carpal tunnel syndrome. The Cochrane database of systematic reviews. 2023;2(2):Cd015148.
2. Billig JI, Gunaseelan V, Yazdanfar M, Sears ED, Iwashyna TJ, Chang T, et al. Gabapentinoid Prescribing for Carpal Tunnel Syndrome. Hand (New York, NY). 2023;18(1_suppl):106s-13s.
3. Bland JDP. Carpal tunnel syndrome in pregnancy. Muscle Nerve. 2023;68(4):345-7.
4. Bland JDP. Use of nerve conduction studies in carpal tunnel syndrome. The Journal of hand surgery, European volume. 2023;48(10):976-85.
5. Bollmann G, Bouvet C, Beaulieu JY. Recurrent carpal tunnel syndrome: Outcomes after neurolysis and synovial flap. Hand surgery & rehabilitation. 2023;42(3):236-42.
6. Du J, Yuan Q, Wang XY, Qian JH, An J, Dai Q, et al. Manual Therapy and Related Interventions for Carpal Tunnel Syndrome: A Systematic Review and Meta-Analysis. Journal of integrative and complementary medicine. 2022;28(12):919-26.
7. Malakootian M, Soveizi M, Gholipour A, Oveisee M. Pathophysiology, Diagnosis, Treatment, and Genetics of Carpal Tunnel Syndrome: A Review. Cellular and molecular neurobiology. 2023;43(5):1817-31.
8. Rotem G, Arami A. Carpal Tunnel Syndrome. The Israel Medical Association journal : IMAJ. 2023;25(7):507-10.
9. Gao N, Yan L, Ai F, Kang J, Wang L, Weng Y. Comparison of the Short-Term Clinical Effectiveness of 5% Dextrose Water, Platelet-rich Plasma and Corticosteroid Injections for Carpal Tunnel Syndrome: A Systematic Review and Network Meta-analysis of Randomized Controlled Trials. Archives of physical medicine and rehabilitation. 2023;104(5):799-811.
10. Garcia JO, Scott D, Parikh P, Curley KL, Turkmani A. Understanding carpal tunnel syndrome. JAAPA : official journal of the American Academy of Physician Assistants. 2022;35(12):19-26.
11. Karjalainen TV, Lusa V, Page MJ, O'Connor D, Massy-Westropp N, Peters SE. Splinting for carpal tunnel syndrome. The Cochrane database of systematic reviews. 2023;2(2):Cd010003.
12. Chen FR, Kerluku J, Manzi JE, Chen AZ, Nguyen JT, Wessel LE, et al. Boston Carpal Tunnel Questionnaire Scores Alone Do Not Predict Surgical Intervention for Patients With Carpal Tunnel Syndrome. Hand (New York, NY). 2023;18(1_suppl):71s-6s.
13. De Kleermaeker FG, Boogaarts HD, Meulstee J, Verhagen WI. Minimal clinically important difference for the Boston Carpal Tunnel Questionnaire: new insights and review of literature. Journal of Hand Surgery (European Volume). 2019;44(3):283-9.
14. De Kleermaeker FG, Levels M, Verhagen WI, Meulstee J. Validation of the Dutch version of the boston carpal tunnel questionnaire. Frontiers in Neurology. 2019;10:1154.
15. Ijaz MJ, Karimi H, Gillani SA, Ahmad A, Chaudhary MA. Response to Muhammad Junaid Ijaz et al (JPMA, Vol 72, No-04, April 2022)-Effect of median nerve neuromobilization on functional status in patients with carpal tunnel syndrome: A double blinded randomized control trial. Journal of Pakistan Medical Association. 2022;72(9):1887-.
16. Multanen J, Ylinen J, Karjalainen T, Ikonen J, Häkkinen A, Repo JP. Structural validity of the Boston Carpal Tunnel Questionnaire and its short version, the 6-Item CTS symptoms scale: a Rasch analysis one year after surgery. BMC musculoskeletal disorders. 2020;21:1-14.
17. Hamzeh HH, Alworikat NA. Cross cultural adaptation, reliability and construct validity of the Boston Carpal Tunnel Questionnaire in standard Arabic language. Disabil Rehabil. 2021;43(3):430-5.
18. Alanazy MH, Alaboudi M, Almaari A, Alhumayyd Z, Albulaihe H, Muayqil T. Translation and validation of the Arabic version of the Boston carpal tunnel syndrome questionnaire. Neurosciences. 2019;24:296+.
19. Arooj A, Amjad F, Tanveer F, Arslan AU, Ahmad A, Gilani SA. Translation, cross-cultural adaptation and psychometric properties of Urdu version of upper limb functional index; a validity and reliability study. BMC musculoskeletal disorders. 2022;23(1):691.
20. Karabinov V, Slavchev SA, Georgiev GP. Translation and validation of the Bulgarian version of the Boston Carpal Tunnel Questionnaire. Cureus. 2020;12(10).
21. Bulatovic D, Nikolic D, Hrkovic M, Filipovic T, Cirovic D, Radosavljevic N, et al. Reliability, Validity and Temporal Stability of the Serbian Version of the Boston Carpal Tunnel Questionnaire. Medicina. 2022;58(11):1531.
22. Bianchi M, Coratella G, Dello Iacono A, Beato M. Comparative effects of single vs. double weekly plyometric training sessions on jump, sprint and change of directions abilities of elite youth football players. J Sports Med Phys Fitness. 2019;59(6):910-5.
23. Keramat KU, Babur MN, Mcloughlin P, Bhutta NI, Bhutta AH, Khattak P, et al. Translation and cultural adaptation of Shoulder Pain and Disability Index in Urdu (SPADI-U). Rehman Journal of Health Sciences. 2021;3(1):10-6.
24. FATIMA NUA, QURAT-UL-AIN FK, RAZA MA, WARIS M. Urdu Translation and Validation of Activities-Specific Balance Confidence (ABC) Scale.

25. Ramdan IM. Reliability and validity test of the Indonesian version of the hamilton anxiety rating scale (ham-a) to measure work-related stress in nursing. 2019.
26. Multanen J, Ylinen J, Karjalainen T, Kautiainen H, Repo JP, Häkkinen A. Reliability and Validity of The Finnish Version of The Boston Carpal Tunnel Questionnaire among Surgically Treated Carpal Tunnel Syndrome Patients. Scandinavian journal of surgery : SJS : official organ for the Finnish Surgical Society and the Scandinavian Surgical Society. 2020;109(4):343-50.
27. Sarhan FMA, Al-Jasim A, Abu Al-Halawa D, Dukmak ON, Ayyad R, Odeh MA. The applicability of Boston Carpal Tunnel Questionnaire as a screening tool for carpal tunnel syndrome among potential high-risk female population in the West Bank: a cross-sectional study. Annals of medicine and surgery (2012). 2023;85(4):650-4.
28. Teunis T, Domico A, Ring D, Fowler J. Correspondence of the Boston Carpal Tunnel Questionnaire with severity of median neuropathy. The Journal of hand surgery, European volume. 2023;48(10):1006-13.

بوسٹن کارپل ٹنل سنڈروم سوالنامہ

حصہ 1 از 2: علامات کی شدت کا پیمانہ (11 سوالات)

سوال	1	2	3	4	5
.1رات کو آپ کے ہاتھ یا کلائی کا درد کتنا شدید ہے؟	معمول	ہلکا	درمیانہ	شدید	بہت زیادہ
.2پچھلے دو ہفتوں کے دوران ایک عام رات میں آپ کو درد نے کتنی بار جگایا؟	معمول	ایک بار	2سے 3 بار	4سے 5 بار	5سے زیادہ بار
.3کیا آپ عام طور پر دن کے وقت ہاتھ یا کلائی میں درد محسوس کرتے ہیں؟	کوئی درد نہیں	ہلکا	درمیانہ	شدید	بہت سنگین
.4دن کے وقت آپ کتنی بار ہاتھ یا کلائی کا درد محسوس کرتے ہیں؟	معمول	1-2بار/دن	3-5بار/دن	5سے زیادہ بار	مسلسل
.5درد کا ایک واقعہ اوسطاً کتنی دیر تک رہتا ہے؟	معمول	10 >منٹ	10 – 60منٹ جاری	60 >منٹ	مسلسل
.6کیا آپ کے ہاتھ میں سنسناہٹ (حس کا زوال) ہوتی ہے؟	معمول	ہلکا	درمیانہ	شدید	بہت سنگین
.7کیا آپ کے ہاتھ یا کلائی میں کمزوری محسوس ہوتی ہے؟	معمول	ہلکا	درمیانہ	شدید	بہت سنگین
.8کیا آپ کے ہاتھ میں جھنجھناہٹ کا احساس ہوتا ہے؟	معمول	ہلکا	درمیانہ	شدید	بہت سنگین
.9رات کے وقت سنسناہٹ یا جھنجھناہٹ کی شدت کتنی ہوتی ہے؟	معمول	ہلکا	درمیانہ	شدید	بہت سنگین
.10پچھلے دو ہفتوں کے دوران ایک عام رات میں آپ کو سنسناہٹ یا جھنجھناہٹ نے کتنی بار جگایا؟	معمول	ایک بار	2سے 3 بار	5بار	5سے زیادہ بار
.11کیا آپ کو چھوٹی اشیاء جیسے کہ چابیاں یا قلم وغیرہ پکڑنے یا استعمال کرنے میں دشواری ہوتی ہے؟	بغیر دشواری کے	تھوڑی دشواری	درمیانہ دشواری	بہت مشکل	بہت زیادہ مشکل

حصہ 2 از 2: فنکشنل اسٹیٹس اسکیل (8 سوالات)

سرگرمی	1	2	3	4	5
.1لکھائی	کوئی دشواری نہیں	تھوڑی دشواری	درمیانہ دشواری	شدید دشواری	سرگرمی نہیں کر سکتے
.2کپڑے بٹن کرنا	کوئی دشواری نہیں	تھوڑی دشواری	درمیانہ دشواری	شدید دشواری	سرگرمی نہیں کر سکتے
.3پڑھتے وقت کتاب تھامنا	کوئی دشواری نہیں	تھوڑی دشواری	درمیانہ دشواری	شدید دشواری	سرگرمی نہیں کر سکتے
.4ٹیلیفون ہینڈل پکڑنا	کوئی دشواری نہیں	تھوڑی دشواری	درمیانہ دشواری	شدید دشواری	سرگرمی نہیں کر سکتے
.5مرتبان کا ڈھکن کھولنا	کوئی دشواری نہیں	تھوڑی دشواری	درمیانہ دشواری	شدید دشواری	سرگرمی نہیں کر سکتے
.6گھریلو کام	کوئی دشواری نہیں	تھوڑی دشواری	درمیانہ دشواری	شدید دشواری	سرگرمی نہیں کر سکتے
.7خریداری کی ٹوکری اٹھانا	کوئی دشواری نہیں	تھوڑی دشواری	درمیانہ دشواری	شدید دشواری	سرگرمی نہیں کر سکتے
.8نہانا اور کپڑے پہننا	کوئی دشواری نہیں	تھوڑی دشواری	درمیانہ دشواری	شدید دشواری	سرگرمی نہیں کر سکتے