

Validation and Cross Cultural Adaptation of Sinhala Version of Psychosocial Impact of Dental Aesthetic Questionnaire (PIDAQ) among Adolescents Seeking Orthodontic Treatment

W.B.M.C.R.D. Weerasekera^{1*}, S.L. Pathirage² and M.M.S.L. Mellawa¹

¹*Department of Community Dental Health, Faculty of Dental Sciences,
University of Peradeniya, Peradeniya 20400, Sri Lanka*

²*Teaching Hospital Karapitiya, Galle 80000, Sri Lanka*

**chandimaw@pdn.ac.lk*

Use of a psychosocial index is essential for the assessment of the impact of malocclusion on the quality of life of the orthodontic patients. Psychosocial Impact of Dental Aesthetic Questionnaire (PIDAQ) developed for young adults seeking orthodontic treatment is a multi item psychometric instrument which investigates on four domains: dental self confidence, social impact, psychological impact and aesthetic concern. PIDAQ comprises of 23 items. The objective of the present study was to determine the construct validity and reliability of Sinhala version of PIDAQ. This was a cross sectional descriptive validation study and translation of the original English version of PIDAQ into Sinhala was done by a team of professionals adhering to translation and cross cultural adaptation and validation guidelines. Inclusion and exclusion criteria were checked and in a convenient sampling method 11-17 year old adolescents were recruited from University Dental hospital, Peradeniya and Teaching Hospital Karapitiya. Data was analyzed using SPSS version 21 and evaluated for reliability and validity. A total of 479 adolescents (51% of males and 49% of females) participated and mean age was 13.1 years. Kaiser-Meyer-Olkin measure of sampling adequacy was 0.870. A principal component analysis was conducted on the 23 items with varimax rotation and revealed 05 components with 57.88% variance. The internal consistency measured with Cronbach alpha value was 0.8 ($p < 0.001$). The internal consistency for subdomains were 0.8, 0.8, 0.6 and 0.8. The mean PIDAQ total score and the score of the Dental Esthetic Component of the Index of the Orthodontic Treatment Need (IOTN) showed significant correlation. PIDAQ Sinhala version has good internal consistency and construct validity. The Sinhala version of the PIDAQ is a reliable and valid tool to assess the psychological impact of the dental esthetics of the Sinhala speaking adolescent orthodontic patients.

Keywords: Quality of life, Adolescents, Orthodontics, Dental esthetics, Sinhala