Pilot Translation of the Social Skills Improvement System Questionnaire Among Indian Children

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Abstract

Background—Many developmental and mental disorders significantly impair the ability of children and adolescents to successfully function in society. Among several scales evaluating social performance, the Social Skills Improvement System by Gresham and Elliot evaluates the social functioning of children from ages 3 to 18 years. It has three forms per child - to be filled in by the child himself/herself, by the parent and the teacher. Each form has 75, 79, and 83 items, respectively, assessed on a four-point system.

Methodology—The present study aimed at translating and validating this scale on a small pilot sample of parents and child only (n = 21). The Cronbach alpha of the Hindi forms was estimated. Intraclass correlation between each item of the original and translated versions of the scale was examined.

Results—For the parent form, Cronbach alpha was 0.9, and for the student form, it was 0.8. The maximum correlation was present in the parent form (40% of items). Self-scoring forms by children correlated 23% of the time between the Hindi and English versions.

Conclusion—Significant correlation was not seen between the original and translated versions. Possible reasons are discussed.

Keywords

Correlation; social skills; translation

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Conflicts of interest

There are no conflicts of interest.
Introduction

Social skills have been defined by Elliot and Gresham\cite{1,2} as “learned behaviors that allow an individual to engage in socially acceptable interactions with other people such that the interactions lead to positive responses from others and aid in the avoidance of negative responses.”

Social skills play an instrumental role in various domains of living. A social skill deficit may result in poor academic performance.\cite{3} Social skill deficits resulting in social impairment have been reported to be a marker of underlying psychopathology.\cite{14} Impaired social functioning is a hallmark of schizophrenia and autism.\cite{5} The impairment is reflected in areas of social cognition,\cite{6,7} social judgment,\cite{8,9} detecting basic emotions,\cite{10} and difficulty in understanding emotions in a social environment.\cite{11}

Research on social skills has focused on normally developing children and adolescents, aggressive children and adolescents, juvenile delinquents, adolescent substance abusers, and antisocial youth.\cite{12} Social skills training is said to improve these skills.

Several instruments have been developed to examine and aid diagnosis of psychopathology. For instance, the Child/Adolescent Psychiatry Screen – CAPS (http://www2.massgeneral.org/schoolpsychiatry/ - accessed in 2014) is a stepwise aid to parents to screen for psychopathology, which subsequently aids in diagnosis. The Mini International Neuropsychiatric Interview for Children and Adolescents - MINI-KIDS\cite{13} is a structured interview to detect psychopathology among children for diagnosis. These instruments can be used in any culture to detect psychopathology. However, there are fewer, culture fair instruments to detect social skills among children who do not otherwise report any problems.

Social skills questionnaires focus on deviations from the norm which may not be part of diagnosable disorders. Thus, they can be used in epidemiological studies of children not obviously suffering from psychopathology, to detect subtle changes in social skills and behavior which could act as markers for future mental disorder. An important aspect of treatment is also its efficacy in changing the social performance of individuals\cite{12} for which such scales may prove to be useful. This study was conducted to assess the Hindi version of a social skills instrument which could be used among Indian children from all strata of society who may not have a diagnosable psychiatric disorder.

Methodology

The study was conducted at the Department of Psychiatry, PGIMER, Dr. Ram Manohar Lohia Hospital, New Delhi, India, in 2012.

Several scales to assess social skills were reviewed, of which some are described below.

The Checklist for Adaptive Living Skills,\cite{14} is a criterion-referenced, individually administered measure of approximately 800 specific adaptive behaviors. It can be used with children or adults and individuals with or without disabilities. It has high internal
consistency and high criterion-related validity. The items were reviewed in detail. Most of them were not found suitable to the Indian context. Hence, this scale was not considered appropriate for Indian children.

The Independent Living Skills Survey,\(^\text{[15]}\) is a 103 item scale that assesses functioning in basic community living skills. The scale has good internal and external consistency, interrater reliability, sensitivity, and predictive validity.\(^\text{[14]}\) The scale assesses these functions in severely and permanently mentally ill. The authors wanted a scale suitable for children who were not mentally ill. Hence, this scale could not be used.

The Sheehan Disability Scale was reviewed.\(^\text{[16]}\) It assesses individuals on three domains - work life, social life, and family life. However, the scale is meant for chronically ill patients and generates a gross score of disability. Hence, this scale was not considered appropriate.

The Social Skills Improvement System (SSIS) (Gresham and Elliot, 2008)\(^\text{[1]}\) has four rating forms. They are teacher, parent, student I (ages 8–12 years), and student II (ages 13–18 years). There are 83, 79, 75, and 75 items, respectively, in each form. Several questions are repeated in the various forms, to obtain points of view of different scorers. The scale assesses three domains - social skills, problem behavior, and academic competence. Social skills are divided into sub-domains of communication, cooperation, assertion, responsibility, empathy, engagement, and self-control. Problem behavior has sub-domains of externalizing, bullying, hyperactivity/inattention, internalizing, autism spectrum. The academic competence scale is rated by the teachers on math performance, motivation, parental support, and general cognitive functioning. Questions are scored on two scales - frequency and importance. Teachers and parents rate the frequency on a four-point scale as never, seldom, often, and almost always, while students rate it as not true, a little true, a lot true and very true. Importance ratings are to be done by teachers, parents, and older students (13–18 years) on a three-point scale of not important, important, and critical.

On thorough reading and discussion, these domains and questions were thought to be largely appropriate for the Indian setting. SSIS was selected for translation and field testing for the present study. It was found to be most suited to study normally developing Indian children, as social skills have not been assessed using Indian language questionnaires suited to the Indian situation.

The study was conducted in two phases. In phase one, it was decided to use the parent and child forms only, as given the large size of Indian classrooms and the number of questions in the scale, teachers may not have the time to complete forms for individual children.

Permission to translate and validate the scale in India was obtained from the authors. The English version was translated into Hindi by three clinical psychologists and back-translated into English by a psychiatrist, a clinical psychologist, and an Ayurveda physician, all proficient in both languages. Reliability meetings were held to check for agreement between the back translated and original English items and compared to the Hindi version. The participants at these meetings were one board certified psychiatrist, two psychologists, and one Ayurveda physician. All items which retained the original meaning of the English questions were retained and others suitably modified. Items in the student forms were
identical for both age groups (8–12 years and 13–18 years) but different for parent assessment. A final Hindi draft, one parent, and one student form were prepared for ages 10–18 years.

As the final test, both versions of the SSIS were administered to a small test sample of 14 bilingual consenting parents and their normally developing older children from whom assent was obtained (ages 13–18 years) \((n = 7)\). The sample was recruited randomly from among normally developing children of families visiting the department and those residing in the community. Consent to participate was obtained. Anonymity and confidentiality were maintained.

The English and Hindi versions of the scales were administered in two sessions with a gap of 10–15 days in between. While six families were administered the Hindi versions of the scale in the first session and the original English in the second session, eight were administered the original English first and the Hindi version subsequently (14 in all).

Answers on the Hindi and English versions were compared using SPSS version 20.0 (IBM Corp., Armonk, NY).\(^{17}\) Cronbach alpha was determined for the Hindi version of the parent and student forms. Intraclass correlation was determined between each item of the original English and Hindi versions for both parent and student forms. The confidence interval was decided at 95%. After the results were obtained, each item was also examined for the 21 answer sheets to determine if there was any systematic error in answering.

**Results**

The sample consisted of 14 bilingual parents and seven bilingual children belonging to middle socioeconomic status. The parent form was answered by five fathers and nine mothers. The student form was answered by five boys and two girls. Out of seven, four children were readministered the other language form after 15 days and three children after 10 days. Five parents were readministered the other from after 15 days and 9 after 10 days. The child and parent form in each family were administered the same day. It appeared that both parent and child considered each question and answered truthfully and seriously. However, no questions were asked as to the quality of the items, either from parent or child.

In order to check the reliability of the translated versions, the Cronbach alpha was calculated. The Cronbach alpha coefficient for the parent form was 0.9 and for the student form was 0.8. This showed that the translated versions had high internal consistency. The intraclass correlation for parent form was 0.6–0.8 for only 40% of the items whereas 60% of the items did not correlate. The student form had an intraclass correlation of 0.7–0.8 for only 23% of items, and 77% of the items did not correlate.

The average time taken to administer the scale was 45 min. All of them had qualms about the time in the second administration of the scale. All the children (except one) became restless during sessions.
Discussion

The SSIS scale, it was felt, would be useful for assessing social skills among Indian children of varied ages. Due to its high face validity, as assessed by a group of experienced researchers, it was felt to be a suitable instrument even though developed and tested in the USA. It was translated with rigor and agreement by a large group of researchers. While testing, a small sample was tested due to the length of the scale and the cooperation required from assessed. Results from this small sample of apparently cooperative adults and adolescents were not satisfactory.

The Hindi and English versions of the SSIS did not show high correlation in spite of rigor in translation even in a small but randomly selected sample of middle-class bilingual parents and their teenage children. Parent forms had higher agreements than the children’s forms but only on about half the items. Among the children, only one-fourth of items showed agreement.

Parents could grasp the deeper meaning of items and, therefore, may have answered more accurately than the children. Children may have found the American English version more difficult to understand. The Hindi words used in this translation may not have been understood by Delhi-based children who commonly use mixed Hindi-English words, differing from place to place and class to class. The gap of 10–15 days between the two versions ensured that answers were not repeated only because they remembered their previous replies.

Parents could have had a higher level of concern as they were assessing qualities or deficits of their children. Hence, they were more alert, careful, and consistent in their responses. Parents had more queries, asked for clarifications and the utility of the scale. Children, on the other hand, may have undertaken this exercise like any other playful task. There is a possibility that they might not have been interested in answering the questions accurately and just ticked answers randomly. As the test was lengthy, they may have lost interest while answering.

Less number of items with significant correlation could also be attributed to the unwillingness of the participants to disclose themselves, or a lack of pro-test taking behavior. The authors translated and back-translated the scale in India which was not its country of origin. Although the instrument is simple, the authors may not have been able to clarify minor doubts about the instrument from the developers. This could also be a limitation.[18]

The items had good face validity in both the English and the Hindi versions. However, the responses to the items did not correlate. As test administrators, we believed that the Hindi and English items in both versions meant the same, which may not have been the case for the respondents. For the responders, the language differences may have influenced the meaning and interpretation of the items.

In cross-cultural validation of an instrument, sequential steps are followed. However, back translation is assumed to be prone to two flaws: first that any research team would be able to
assess the equivalence of the source version and translated version of an instrument; second, translation is fallible and back translation is not.[19] With respect to the present study, care and rigor were observed in each step. The translators and back-translators were all experts in this field. However, some gap remained which yielded a scientifically unsatisfactory result. The small sample size could be one possibility, but it would be difficult to justify a larger sample with greater inputs of effort time and money in possibly less cooperative respondents. The acceptability of the scale in the Indian situation could influence these results as well. Perhaps, a scale developed in India, which reflects the Indian cultural realities more accurately will serve the purpose better. Such a scale would prove its worth in clinical practice as well as in research.

Conclusion

The SSIS was translated, and an attempt was made to validate it in India. At the outset, the sample size taken was small. With this sample, the results obtained did not show a significant correlation between the original and translated versions. There is a need for such a scale to assess the limits of normal behaviors of Indian children. It is possible that a larger sample that approached the task more earnestly may have shown better correlation, as also a larger sample from a higher or better-educated class with requisite psychological sophistication. It was felt that for a sample of middle or lower middle-class families which access public health services; this scale may not be reliable.

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