Reliability and Validity of the Chinese Version of the Teacher Form of Social Emotional Assets and Resilience Scales for Children

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Abstract. This study was to test the validity and reliability of an instrument in the context of Chinese kindergarten. This instrument was the Chinese version of teacher form of Social Emotional Assets and Resilience Scales (SEARS-T). A sample of Chinese kindergarten teachers were obtained and the data were analyzed. The results showed that the internal reliability and interrater reliability were sound. The Cronbach’s Alpha of the subscales of Responsibility, Social competence, Self regulation, and Empathy were .900, .933, .930, and .895, respectively. The four subscales ratings of the two teachers were highly correlated. The values of correlation indicate that the scores of the subscale of the SEARS-T (responsibility, social competence, and empathy) was significantly correlated with closeness respectively.

Introduction

The study intended to test the validity and reliability of an instrument in the context of Chinese kindergarten. The name of this instrument is the teacher form of Social Emotional Assets and Resilience Scales (SEARS-T) [10]. The SEARS-T had four constructs: responsibility, social competence, self-regulation and empathy. The purpose of this instrument is to measure the social emotional competence and assets of children and adolescents. The study was a quantitative study that intends to test the validity and reliability of the Chinese version of the teacher form of Social Emotional Assets and Resilience Scales (Chinese version of SEARS-T) in the context of Chinese kindergarten.

The study, in evaluating the convergent validity of the Chinese version SEARS-T, also required the teachers to complete the Chinese version of teacher form of the Student-Teacher Relationship Scale (STRS) hypothesized to be related to their students’ social emotional competence. The exploratory research done in the study provided some of the first empirical data regarding using appropriate instrumentation to assess the Chinese teachers’ perspective of children’s social emotional competence.

Literature Review

Significance of Social Emotional Competence for Children

Social emotional competence is an integrated ability involving both emotional competence and social skills. It is the ability to take another’s perspective concerning a situation and to learn from past experience and being able to use the skills to have more positive interpersonal relationships in a variety of situations [18]. It is a complex psychological construct that is associated with later school readiness and social success [7,16]. Early childhood is an important period to conduct interventions to remediate social, emotional, and behavioral maladjustments [8, 12,13].

Childhood is a vital period for the development of social competence. This process of development can be influenced by a variety of elements related to both nurture and nature [9]. As a result, educators should pay great attention to improving social competence in preschoolers and kindergarteners because this age is considered critical [1,7,16]. In this period, children are able to
engage in peer interactions and student-teacher relationships. This includes making friends, cooperating with their peers and communicating with their teachers [17].

Social relationships of young children play essential roles in their future development. Evidence supports the proposition that good peer and adult-child relationships have a positive impact on children’s learning interests and academic achievement [4]. Children who have negative relations with their peers, parents or teachers tend to have problems in learning activities and behaviors in schools [6, 15]. One reason that students may not develop well in school readiness is that their peers or teachers in this environment may not welcome them.

Young children who are diagnosed as having deficits in social emotional competence tend to experience similar problems in elementary school and display a variety of problems in social and academic development in the future [2]. Early intervention aimed at fostering social skills and emotional competence has been found to minimize maladjustments and improve social development in the future [2,3,5,19]. Therefore, it is critical to monitor children’s social emotional competence through appropriate assessments.

However, the assessment of positive social emotional assets or resilience is often neglected [11]. In addition, the instruments assessing children’s social emotional competence which focusing on the positive assets, especially for the Chinese version are few.

Studies on this topic in China is at the starting stage and need development. Therefore, this is very necessary to provide Chinese researchers and educators in early childhood an appropriate instrumentation to assess teachers’ perspective of children’s social emotional competence. There is a need to carry out studies developing related instruments, translating and testing the original versions of measures.

Instruments for Evaluate Social Emotional Competence

The teacher form of an instrument called the Social Emotional Assets and Resilience Scales (SEARS-T) was employed in the present study to assess social emotional competence. The Chinese version of teacher form of the Student-Teacher Relationship Scale (STRS) is an instrument that is used to assess the student-teacher relationship. However, because of the arguable reliability of Dependency, only the scores from the subscales of conflict and closeness were used to test the convergent validity of the SEARS-T in this study.

The developers of the SEARS-T note that its function is to screen and assess the social emotional strengths, assets, resilience and adaptive behaviors to be needed in resolving problems in daily social activities [11]. Items were rated using a 4-point rating format with higher numbers reflecting higher levels of social emotional competence.

Pianta [14] considers the STRS to have sufficient reliabilities of the subscales of closeness and conflict. However, the Dependency scale does not result in scores with sufficient reliability for use. Zhang [20] translated the STRS into Chinese and tested the validity and reliability of the Chinese version. The Chinese version of STRS includes 28 items and contains three subscales: conflict, closeness and dependency. The Chinese version of STRS was frequently used in research studies in China and adequate reliability and validity was reported [20,21]. The internal reliabilities of subscales closeness and conflict were tested and the values of Cronbach’s alphas were .81, and .83, respectively [20].

Methodology

This study was designed to test the validity and reliability of the instrument in the context of the Chinese kindergartens, to be referred to as the Chinese version of SEARS-T, since only the teacher’s form has been translated. This form was designed to assess the classroom teachers’ perspective of their students’ social emotional competence. After gaining approval from the Psychological Assessment Resources (PAR), the researcher translated it from English to Chinese and then another college English instructor, with a master’s degree in English, translated it back into English without reviewing the original English version, in a process called back translation, which was approved by PAR.
Two of the teacher participants provided data for evaluating the interrater reliability and the other ten teachers provided data for evaluating convergent validity by assessing their students.

For evaluation of interrater reliability, two teachers serving in the same class in one kindergarten completed the Chinese version of SEARS-T to assess all the children (30 children) in the class. To measure the interrater reliability of the Chinese version of SEARS-T, Pearson correlation coefficients were calculated for the total score and each of the four subscale scores.

For evaluation of convergent validity, the other ten teachers completed the Chinese version of SEARS-T and the Student-Teacher Relationship Scale (STRS) [14]. Each teacher participant, for evaluation of convergent validity, randomly selected three of their students for whom social emotional competencies were reported using the STRS and the Chinese version of SEARS-T. To measure convergent validity, Pearson correlation coefficients were calculated between the STRS and the Chinese version of SEARS-T subscale scores. The data for evaluating convergent validity and for interrater reliability (randomly selected one teacher’s data) were all used in evaluating the internal consistency reliability.

The confidentiality of the students was protected. The names of the teacher and the student participants were coded. All the information in the study was reported in a way that did not disclose the teacher and student participant names.

Results

To test the interrater reliability, two teachers in one class of the kindergarten grade in a school in Minhang District in Shanghai were recruited. They each independently rated 30 students (15 boys and 15 girls) in their shared class and the scores for each of the four scales were correlated.

The responsibility scale ratings of the two teachers were highly correlated, with \( r = .894, p < .001 \). Similarly, the correlations for self-regulation (\( r = .843 \)), social competence (\( r = .914 \)), and empathy (\( r = .904 \)) were all highly correlated and significant (\( p < .001 \)).

To test the convergent validity, 10 teacher participants in another school were recruited to assess 30 kindergarteners’ (15 boys and 15 girls) social emotional competence and student-teacher relationship by using the Chinese version of SEARS-T and the Chinese version of STRS instruments, respectively.

The social emotional competence score, based on the total score across the four Chinese version of SEARTS-T subscales was significantly correlated with closeness, \( r = .435 \).

As shown in Table 1, the score of self-regulation subscale was not significantly correlated with the score of closeness. The score of responsibility, self-regulation and empathy subscale was negatively correlated with the score of closeness but not significantly. The values of correlation indicate that the scores of the subscale of the Chinese version of SEARS-T (responsibility, social competence, and empathy) was significantly correlated with closeness respectively. The social competence subscale was positively correlated with conflict but not significant.

<p>| Table 1. Correlations between Social Emotional Competence and Student-Teacher Relationship. |
|---------------------------------------------------|---------------------------------|---------------------------------|</p>
<table>
<thead>
<tr>
<th></th>
<th>Conflict</th>
<th>Closeness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td>-.096</td>
<td>.470**</td>
</tr>
<tr>
<td>Social competence</td>
<td>.027</td>
<td>.425*</td>
</tr>
<tr>
<td>Self-regulation</td>
<td>-.011</td>
<td>.314</td>
</tr>
<tr>
<td>Empathy</td>
<td>-.003</td>
<td>.375*</td>
</tr>
<tr>
<td>SEARS Total</td>
<td>-.020</td>
<td>.435*</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

To test the internal consistency reliability, the teacher-reported assessments of 60 kindergarteners’ social emotional competence were used. The Cronbach’s Alpha of the subscales of
Responsibility, Social competence, Self-regulation, and Empathy were .900, .933, .930, and .895, respectively.

Discussion
The study results showed that the interrater reliability and the internal consistency reliability were sound. Because the focus of SEARS-T is on positive aspects of the participants’ social emotional competence, its positive correlations between scores of SEARS-T with values of closeness and its negative correlations between scores of SEARS-T with values of conflict were reasonable. The social competence subscale was positively correlated with conflict which was not consistent with the prediction, while the correlation was not significant. In sum, although some of the subscale’s convergent validities were not quite well, the validity of the entire instrument was sufficient to use in further studies.

Summary
In summary, this study evidence suggested that the interrater reliability and internal consistency reliability of the adapted the Chinese version of SEARS-T scale were sufficient. Also, the correlation between the Chinese version of SEARS-T and the Chinese version of STRS provides some preliminary evidence regarding the convergent validity of the Chinese version of SEARS. Therefore, the Chinese version of SEARS-T was suggested into used in further study to evaluate children’s social emotional competence.

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References


