

## **Translation, Adaptation, and Validation of Children's Action Tendency Scale**

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The present study aims at the translation, adaptation and validation of Children's Action Tendency Scale (CATS; Deluty, 1979). The translated and adapted version was administered upon the sample of children ( $N = 88$ ) aged 8-15 years. Psychometric properties of the translated and adapted version of CATS revealed satisfactory test-retest reliability for the three subscales, i.e., for Submissiveness (.70), Assertiveness (.60), and Aggressiveness (.60), respectively ( $p < .01$ ). Convergent and discriminant validity showed differential correlation of the subscales with different dimensions of the Social Skills Scale (Khan, 2005), and Social Competence Scale (Shehzad, 2001). Findings show that translated and adapted version of CATS is a reliable and valid instrument to assess submissiveness, assertiveness, and aggressiveness among Pakistani children.

*Keywords:* Submissiveness, assertiveness, aggressiveness, children

Assertiveness is one of the important social skills (Thompson, Bundy, & Bronchaheu, 1995) and one of the indicators of social competence (Griffin, Nichols, Birnbaum, & Botvin, 2006; Kenedy, Spence, & Hensley, 1988). Different theories explain the factors behind the development of assertive and aggressive response styles in children. Social learning theory is the strongest theory amongst others (i.e., biological and psychodynamic) in explaining the origin and maintenance of aggressive behaviors, which emphasizes importance of imitation and reinforcement (Kauffman, 1985). Same theory can be

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used to explain the origin and maintenance of submissive and assertive behavior as well.

Children of different age groups show different patterns of assertive and aggressive behaviors. Much aggressive behavior is quite natural in early childhood. Manning, Heron, and Marshal (as cited in Laing & Chazan, 1986) emphasized that young children who show a "specific hostility" later leads to assertive behavior helps them to be socially well-adjusted in later years as this enables the child to manipulate the environment. Coie, Dodge, Terry, and Wright (1991) also reported age related changes in aggressive behavior and acceptance of aggressive behaviors. Findings of their study revealed that with growing age, aggressive-assertive behavior becomes more differentiated in children. Older boys view justified reactive aggression (was standing up for oneself) as socially acceptable, but would not feel this way about unjustified reactive aggression. Younger boys may not view this distinction and tend to view all reactive aggression as acceptable. This shows the need to have a measure to assess age appropriate submissiveness-assertiveness-aggressiveness continuum of behavior (Coie et al., 1991).

There are many scales available to assess assertiveness and social competence of children and adolescents e.g., Social Competence Scale (Shehzad, 2001), translated version of School Social Behavior Scale (Loona, 2002), and Social Skills Scale (Khan, 2005) for Children. There are very few researches which have been conducted to investigate aggressiveness and submissiveness (Babree, 1997; Yasmeen, 2005). Therefore, present researchers felt the need to translate and adapt Children's Action Tendency Scale (CATS) developed by Deluty (1979) in order to have a reliable and valid measure to assess assertiveness and its alternate behaviors i.e., aggressiveness and submissiveness of school going children.

CATS is a measure to assess submissiveness, assertiveness and aggressiveness in children (aged 6-12 years). It is comprised of 13 conflict situations, which were developed empirically. Each of the conflict situations has three response categories to assess submissiveness, assertiveness and aggressiveness. The response categories have been presented in paired format (i.e., aggressive response against submissive response, aggressive response against assertive response and assertive response against submissive response). This format is helpful in two ways. Firstly, it helps to assess relative strength of three types of responses as final scoring yields three scores (total score always equal to 39). Secondly, this format helps to overcome the socially desirable response of the

participants, as each response has been presented more than once. Validity study revealed that CATS score on submissiveness yielded positive correlation with teacher and peer measures of peer and teacher submissive score, CATS score on assertiveness yielded positive correlation with teacher assertiveness score and CATS aggressiveness yielded positive correlations with peer physical aggression, peer most aggressive response score and teacher verbal aggression score. Deluty (1979) further investigated the psychometric properties of CATS (comprised of 10 situations) because correlations of three of the situations (situation no. 3, 12, and 13) with total aggressiveness score, teacher assertiveness ratings, and total assertiveness score were found as not significant. For thirty items CATS, aggressiveness score yielded significant negative correlation with CATS assertiveness scores. Validity of the subscales was further established as submissiveness subscale correlated positively with social desirability and negatively with self-esteem; whereas aggressiveness subscale correlated negatively with social desirability. Validity study also revealed clinical utility of the scale as hyper aggressive boys had significantly higher aggressiveness score and significantly lower assertiveness scores when compared to boys from public schools (Deluty, 1979).

CATS seem to be a useful measure as it assesses relative strength of submissiveness, assertiveness and aggressiveness in children, it can be useful for both clinical and educational psychologists. Assessment of extreme submissiveness and aggressiveness can enable a teacher or counselor to take decisions regarding any intervention needed to the child. This needs further researches to explore the utility of the CATS to screen children who need professional help. Extreme submissiveness and aggressiveness in children may demand professional help. High intensity and/ or frequency of aggressive behavior can lead to conduct disorder or delinquency, whereas, extreme withdrawal and shy behavior can lead to anxiety. Both kinds of children can benefit from assertiveness training and social skills training (Thompson & Rudolph, 2000; Walker & Roberts, 1992). In order to identify these two groups; therefore, foremost important step would be to have a culturally specific measure to identify high/low submissive, assertive and aggressive children.

CATS seem to be a useful measure for different cultures because of different reasons. Firstly, it has been developed on a sound behavioral theory which emphasized that submissiveness, assertiveness, and aggressiveness are three distinct behaviors (Alberti & Emmons as cited in Deluty, 1979). Secondly, the scale has been

used in different cultures as Indonesia (King, Ollendrick, & Gullone, 1991) and with Latino youngsters (Briggs, Tovar, & Corcoran, 1996).

In this study, CATS was translated and adapted to assess submissiveness, assertiveness and aggressiveness in school going from both the primary and secondary classes. First objective was to translate and adapt of the Children's Action Tendency Scale. Second objective was to determine psychometric properties of the translated and adapted measure of Children's Action Tendency Scale.

## Method

### *Sample*

The sample of the study comprised of 88 children. It included boys ( $n = 39$ ) and girls ( $n = 49$ ), children from private ( $n = 41$ ) and government ( $n = 47$ ) schools. Their age range was 8-15 years. From the total sample, 38 children were from primary classes and remaining 50 children were from secondary classes. The sample was selected from two schools of Peshawar, one was private and the other was government school. Private school included New Frontier Academy (boys' branch) and Frontier Youth Academy (girls' branch) whereas the other school was Federal Government School, Peshawar. Every fifth child was selected from the teachers' register to include in the study. Out of 88 children the sample of 60 children was selected for both convergent ( $n = 30$ ) and discriminant ( $n = 30$ ) validity studies.

### *Instruments*

*Children's Action Tendency Scale (CATS).* The Children's Action Tendency Scale (CATS) is a measure to assess submissiveness, assertiveness and aggressiveness of children between the ages 6-12 years (Deluty, 1979). It is comprised of 13 conflict situations. Every item has three response categories (presented in the paired comparisons), which elicit aggressive, assertive and submissive response. There are no separate items on aggressiveness, assertiveness and submissiveness. It is through the format of CATS questionnaire; that three scores on three dimensions can be obtained. The score range on each dimension range from 0-26 and total score could be 39. The administration of CATS requires the child to choose one response from each alternative. The scores reveal behavioral tendencies of the child on three subscales i.e., submissiveness, assertiveness and

aggressiveness. To better understand this unique response format, a situation and relevant responses from CATS has been given below:

“Situation No 6: You are coming out of your school of school. A kid who is smaller and younger than you throws a snowball right at your head. What would you do?”

a. Beat up the kid (aggressive response)

or

b. Ignore it (submissive response)

a. Tell the kid that throwing at someone's head is very dangerous (assertive response)

or

b. Beat up the kid (aggressive response)

a. Ignore it (submissive response)

or

b. Tell the kid that throwing at someone's head is very dangerous (assertive response)

In above mentioned situation, a child is supposed to tick three choices (one choice from each option). All thirteen situations and responses have been presented in same format. Three scores on submissiveness, assertiveness and aggressiveness are obtained by calculating all the options selected by the respondent. The retest reliabilities for three subscales for the present study were computed on the same sample after four weeks time period i.e., .70 for submissiveness, .60 for assertiveness, and .60 for aggressiveness found to be significant at  $p < .01$ .

*Social Skills Scale.* Social Skills Scale for children (Khan, 2005) is a parent-report measure. The parents of selected sample were contacted in order to report about their children. It is 52 items scale, having four point response categories (ranging from “Never” scored as 0 and “Always” scored as 3). All the items have been phrased positively. Higher the score, more the child can be considered as socially skilled. The reliability of the scale is satisfactory by using three methods i.e., test-retest method (.83), split-half (.86) and alpha coefficient (.83). This scale is comprised of different subscales. For

the present purpose of research following four subscales i.e., Social assertiveness include 7 items with possible score range 0-21, Self-control have 5 items with possible score range 0-15, Communication have 10 items with possible score range 0-30, and Directiveness include 5 items with possible score range 0-15 on these scales were selected. Social assertiveness is a type of assertiveness (Wole & Lazarus, 1966) therefore it should have positive correlation with CATS subscale assertiveness. Similarly, assertiveness should positively be related with communication as assertiveness is one of the social skill facilitates the communication but not to directiveness. Other subscales were Social etiquettes, Sharing, and Co-operation, Apologizing and Empathy were not selected as these subscales may not yield differential relationship with submissiveness, assertiveness and aggressiveness.

*Social Competence Scale.* Social Competence Scale (Shehzad, 2001) is a self-report measure comprised of 22-item. It is a five point rating scale aims at assessment of social competence of adolescents (aged 14-19 years). Among 22 items, 15 items have been positively and 7 items have been negatively phrased. Its Alpha co-efficient reliability is .71. Total score on the scale can be 110. Higher the score on the scale, more the adolescent can be considered as socially competent.

### *Procedure*

Children's Action Tendency Scale was translated and adapted through a multi-stage procedure. At the first stage, seven bilingual experts (M-Phil level researchers) translated and modified the scale in Urdu separately. At the second stage, a committee approach was carried out in which a group comprised of seven M-Phil level researchers in psychology to finalize the Urdu translation and adaptation of Children's Action Tendency Scale. At the third stage, the translated and modified draft was given to three experts (one was Ph.D holder and other two were Ph.D scholars of psychology) who checked the appropriateness of translation and adaptation. At the fourth stage, the translation and adaptation was finalized by the researchers after discussing the three drafts extensively which were evaluated and improved at stage 3. The items were evaluated for the cultural relevance by the experts and some adaptations were made in items no. 6 and 9. In item number 6 "Throws a snowball right on your head" the word snow ball was replaced by rubber ball as children in our culture

do not play with snow ball frequently. Similarly in item number 9 "You are having lunch in cafeteria" the word cafeteria was replaced by school as children of these ages do not familiar with cafeteria.

For the validation of the adapted version of CATS, initially data was collected from 88 children. A sample of 58 children was drawn out of those children from whom data were collected earlier for the validation of CATS; completed the questionnaires again after two weeks. Test-retest reliability was determined for the three subscales of the Children's Action Tendency Scale. In order to determine the construct validity of the scale, inter-subscale correlations were determined for children from primary and secondary classes separately.

Furthermore, two separate validation studies were carried out in order to determine the convergent and discriminant validity of the translated and adapted version of CATS. In the first study, differential relationships of the subscales with selected dimensions of the Social Skills Scale for children from classes 3-5 were investigated. These subscales were selected after reviewing these constructs, which revealed that their relationship will be differential and stronger with the three subscales of CATS.

A sample of thirty parents (of the same children from whom data were collected on translated and adapted version of CATS) completed the Social Skills Scale. In the second study, validation was established by determining differential correlation of CATS subscales with social competence for 30 children from classes 6-9. Two different samples for the study were selected because of two reasons.

Firstly, scales against which translated version of CATS were validated were available for different age groups of children. Social Skills Scale was a valid measure for children, whereas, Social Competence Scale was not found appropriate to assess social competence of children. Therefore, it was administered upon middle and secondary school children. Secondly, having two different samples can give a clear picture about usefulness of translated version of CATS for children from primary, middle and secondary classes.

## Results

The inter scale correlation of assertiveness, submissiveness, and aggressiveness was determined to see how these scales are related with each other.

Table 1

*Inter-scale Correlation of Assertiveness, Submissiveness, and Aggressiveness of CATS Urdu version for children from classes 3-5*

Scales	Submissiveness	Assertiveness	Aggressiveness
Submissiveness	-	-.04	-.59**
Assertiveness	-	-	-.55**
Aggressiveness	-	-	-

\*\* $p < .01$ .

Table 1 show that subscale Assertiveness had negative correlation with subscale Submissiveness. Moreover, negative correlation of Subscales Assertiveness and Submissiveness with subscale Aggressiveness was significant.

Table 2

*Inter-scale correlation of Assertiveness, Submissiveness, and Aggressiveness of CATS Urdu version for children from classes 6-10*

Scales	Submissiveness	Assertiveness	Aggressiveness
Submissiveness	-	-.46**	.52**
Assertiveness	-	-	-.52**
Aggressiveness	-	-	-

\*\* $p < .01$ .

Table 2 shows significant negative correlation of subscale Assertiveness with both the subscales Submissiveness and Aggressiveness for children from classes 6-10 ( $p < .01$ )

Table 3

*Relationship of subscales Submissiveness, Assertiveness, and Aggressiveness of the (CATS) Urdu version with social skills dimensions*

Scales	Submissiveness	Assertiveness	Aggressiveness
S-assert	.11	.03	-.12
S-con	.18	.37*	-.27
Com	-.08	-.21	.12
Dir	-.07	-.13	.04

Note. S assert = Social assertiveness; S-con = Self-control; Com = Communication; Dir = Directiveness; \* $p < .05$ .



Table 3 shows correlation of the subscales Submissiveness, Assertiveness and Aggressiveness with selected dimensions of Social Skills Scale for boys and girls (classes 3-5). Findings reveal differential relationships of the three subscales (Submissiveness, Assertiveness and Aggressiveness) of CATS with these dimensions. Submissiveness yielded positive correlation with Social-assertiveness and Self-control whereas, negative relationship with Communication and Directiveness. Assertiveness yielded positive correlation with Social-assertiveness and significant positive correlation with Self-control; whereas it yielded negative correlation with Communication and Directiveness. Finally, Aggressiveness yielded negative correlation with Social-Assertiveness and Self-control; whereas it yielded positive correlation with Communication and Directiveness.

Table 4

*Relationship of subscales Submissiveness, Assertiveness, and Aggressiveness of CATS Urdu version with Social Competence Scale*

	Submissiveness	Assertiveness	Aggressiveness
<i>Social Competence Scale</i>	-.030	.371*	-.330

Note. SC = Social Competence; \* $p < .05$ .

Table 4 shows correlation of the CATS subscales Submissiveness, Assertiveness and Aggressiveness with Social Competence Scale for boys and girls from classes 6-10. Table shows significant positive relationship of Assertiveness with the Social Competence Scale.

## Discussion

The translated and adapted version of CATS is a reliable and valid measure for children in the Pakistani culture. In order to determine the psychometric properties of the scales, all the 13 situations were retained unlike Deluty's (1979) study because of two reasons. Firstly, present researchers noted that two situations (situation 12 & 13) were related to conflict situations in home setting and perhaps because of this peer and teacher measures of submissiveness, assertiveness and aggressiveness were not found to be significant in Deluty's (1979) study. Secondly, in present study, validity of the scale was established using parent report and self-report measures.

Therefore, it was assumed that retaining the three situations will not lower the validity in the present study.

CATS is a measure which gives three scores (indicating submissiveness, assertiveness and aggressiveness) rather than a total score, therefore, reliability of the three subscales was investigated separately. Findings show that test-retest reliability of the three CATs subscales was found to be significant ( $p < .01$ ) and this is in line with the earlier Deluty's validity study which revealed moderate split-half reliability. Deluty (1979) reasoned for this that CATs is not measuring a trait rather it is an assessment measure of what a child is likely to do in variety of conflict situations, therefore, the scale was named as the Children's Action Tendency Scale.

Validity of the translated and adapted version of CATS was determined by conducting inter-subscale correlation analysis. Results for children from classes 3-5 (Table 1) revealed that Assertiveness had negative correlation with Submissiveness whereas the negative correlation of both Assertiveness and Submissiveness with Aggressiveness was significant ( $p < .01$ ).

Results for children from classes 6-10 (Table 2) revealed that the negative correlation of subscale assertiveness was significant with both the subscales Submissiveness and Aggressiveness ( $p < .01$ ). This significant negative correlation of the two subscales Assertiveness and Submissiveness reveals the need to investigate the personality correlates of assertiveness and submissiveness for children of this age group in order to explore the reasons of the significant negative correlation between the two subscales. Findings of the study show that negative correlation between the subscales (submissiveness and assertiveness) was not significant for children from age 3-5 years; whereas not for children from age range 6-10 years. This shows that CATS can be more effective for children from middle and secondary schools as it can better assess assertiveness and submissiveness for these children rather than for children from primary classes.

Further validation studies were carried out to determine the construct validity of the three subscales. Murphy and Davidshofer (1994) have given the description regarding the importance and procedure to determine the construct validity of a measure. According to them, construct validity depends on a detailed description of the relationship between the construct and a number of different behaviors. The more we know about the construct, the better our chances for determining whether a test provides an adequate measure of a construct. Anastasi and Urbina (1997) emphasize that one method to determine the construct validity is to determine the correlation of a

new test and a similar earlier test. These correlations should be moderately high, but not too high. If a new test correlates too highly with an already available test, then a new test will represent a needless replication.

In order to determine the validity of CATS relationship of the three subscales were determined with different dimensions of the Social Skills Scale for children from classes 3-5 and with social competence scale for children from classes 6-10. Different dimensions of social skills were selected based upon the literature review. Review of the literature revealed that assertiveness is one of the social skills (Hargie & Dickon, 1994). Literature on social competence cites social skills as one of its dimensions (Shehzad, 2001). Secondly, different studies have reported the efficacy of social skills training for shy, withdrawn as well as for the aggressive children (Franco, Christoff, Crimmins & Kelly, 1983; Knapczyk, 1988). This shows that submissive and aggressive children lack certain social skills.

Finally, particular dimensions of Social Skills Scale were selected after understanding their nature and their possible differential correlations with three subscales of CATS consequently. For-example, if assertiveness is increased; it changes into aggression with a possibility to lose self-control. Aggressiveness and directiveness have a common characteristic of dominating others. Social assertiveness should be positively related with both assertiveness and submissiveness; as assertiveness and submissiveness are not opposite to each other. Submissiveness and aggressiveness should not be related to communication when compared to assertiveness. Social etiquettes, sharing and co-operation, apologizing and empathy, were not considered as these dimensions may not yield differential relationship with submissiveness, assertiveness and aggressiveness because these social skills may be present in varying degree in all submissive, assertive and aggressive individuals. Hence, their relationship may not be meaningful and indicative to determine the validity of the three subscales of CATs.

Results revealed that subscale Submissiveness did not yield negative relationship with Social-assertiveness. The possible reason may be that such children may be socially assertive but because of their submissiveness this behavior gets inhibited. It can be concluded that subscale Submissiveness may not actually mean the total absence of the Social-assertiveness. The subscale Assertiveness yielded positive correlation with social assertiveness, which is not significant. The possible reason can be that the translated and adapted version of CATS does not include items to assess social assertiveness rather it

includes items to assess response tendencies in different conflict situations. Both subscales submissiveness and assertiveness were positively related to Social-assertiveness because these two behaviors are not mirror opposite to each other. The subscale Aggressiveness on the other hand yielded negative correlation with the dimension social-assertiveness.

The relationship of subscale assertiveness with self-control is higher and significant ( $p < .05$ ) as compared the relationship of subscale submissiveness with self-control. The possible reason may be that assertiveness involves more self-control in expressing oneself when needed rather than being passive. The aggression subscale yielded negative relationship with self-control. One of the reasons may be that lack of self-control is one of the reasons of aggression. McCullough (1977) conducted a study which reveals efficacy of teaching self-control to reduce aggression. The study was conducted to help 16 years old boy to overcome aggression by the self-control training. The strategies for the self control training included, enabling the boy to interrupt several internal, antecedent events that usually preceded anger, teaching thought stopping technique to counter the sub vocal cursing and teaching relaxation exercise to inhibit the progressive tensing of his body. This research reveals that lack of self-control is related to aggressiveness.

It was further found that both subscales submissiveness and assertiveness have negative relationship with directiveness and subscale aggressiveness was positively related to directiveness. It is because of the nature of the construct directiveness, it was found to be positively correlated with aggressiveness rather than with submissiveness and assertiveness. According to Lorr, Youniss, and Stefic (1991) directiveness involves the ability to take charge, to direct the activities of others and to exert influence on others. This construct is often referred to as dominance, and is a well established concept because it is measured by the dominance scale of the personality research form (Jackson, 1967) and by the directiveness scale in the interpersonal style inventory (Lorr & Youniss, 1983). Results support the findings of the earlier research (Ray, 1981). The researcher found that the score of the directiveness scale had significant positive correlation with aggressiveness and with dominance and significant negative correlation with submissiveness.

Present researcher emphasized that because of the nature of the construct directiveness, it is positively correlated with aggressiveness rather than with submissiveness and assertiveness. Assertive individuals do not aim to dominate rather they aim to express their

feelings when needed. This relationship of the three subscales with Directiveness reveals that aggressive people may have more tendencies to direct whereas assertiveness and submissiveness are based upon understanding others' needs and desires as well. Hammock and Richardson (1992) found as a result of their study that the individuals who reported concern for the needs of others in a conflict situation are not likely to report aggression, whereas, individuals who report using responses to conflict that involve little concern for others reported using aggression as a means to meet their needs. The positive relationship between aggressiveness and directiveness can be explained because both the behaviors show less concern for others needs, but aggressive individuals behave in socially unacceptable way.

Furthermore, it was found that Assertiveness and Submissiveness subscales had negative relationship with the dimension communication where as, aggressiveness had positive relationship with communication. This dimension yielded negative relationship with both submissiveness and assertiveness because assertive individuals also communicate their feelings and wants but not in adaptive way in all situations. They may escalate their assertive responses when needed. Submissive individuals, on the other hand, are passive enough to communicate either in adaptive or in maladaptive way. The positive correlation between aggressiveness and communication is a surprising finding. It can be concluded that this relationship may be due to parental report regarding the social skills of children. They might have perceived aggressive children high on communication because of the dominance aspect in the personality of their children. Moreover, aggression measure was taken from the children and communication scores were taken from parents. Self-reports on communication and determining it's correlation with aggressiveness can give further clarity.

Overall results presented in Table 3 support that CATS can measure assertiveness for children from age 3-5 years as it is significantly related to self-control when compared to submissiveness and aggressiveness. Positive correlation of social assertiveness with submissiveness is higher when compared with assertiveness. This may be because submissive individuals try to please others more than assertive individuals; therefore, they also score positive and high on social assertiveness. This pattern also casts a little doubt upon the validity of CATS to assess submissiveness and assertiveness as distinct response styles as both subscales are positively related to self-control and social assertiveness though having differential degree of correlations. Groot and Prins (1989) also found that ability of both the

CATS to discriminate between submissiveness and assertiveness was low for Dutch children.

One of the reasons may be that assertiveness and submissiveness are not polar opposite. These responses overlap each other as they both involve considering others' feelings as well. Therefore, this pattern of correlation may be because of the underlying theoretical reason rather than methodological cause or because of the technological weaknesses in CATS. Negative correlation of directiveness with submissiveness and assertiveness and its positive correlation with aggressiveness also supports that three response styles are different and CATS can tap these differential response styles for children aged 3-5 years. Only two issue cast doubt for the validity concern of the three subscales for this sample.

Firstly, there is still doubt that CATS may not reliably distinguish between submissiveness and assertiveness for children aged 3-5 years as both submissiveness and assertiveness scored positively on social-assertiveness and self-control. Secondly, the relationship of assertiveness with communication is not in lines of the predicted dimension. Negative relationship of assertiveness with communication can not be supported theoretically. It can be because of the methodological weaknesses of the study, when data on communication were collected from parents.

To determine validity of translated and adapted version of CATS for children from classes 6-10, the correlation of the three subscales was determined with the indigenous Social Competence Scale. It was assumed that assertiveness will have positive relationship with social competence whereas submissiveness and aggressiveness will have negative relationship with social competence, because assertiveness is one of the dimensions of social competence (McClellan & Katz, 2001).

Results of the study revealed significant findings. Assertiveness yielded significant positive relationship with social competence ( $p < .05$ ) whereas subscales Submissiveness and Aggressiveness yielded negative relationship with Social Competence Scale. These findings show that socially competent children are also assertive but they stand low on submissiveness and aggressiveness. This clearly validates the translated version of CATS as its three subscales can distinguish between the types of submissiveness, assertiveness and aggressiveness responses for children from middle and secondary schools.

Overall findings of the study revealed that Submissiveness, Assertiveness and Aggressiveness subscales yielded differential

relationship with different dimensions of social skills and with social competence. This differential relationship shows that the three subscales of the translated and adapted version of CATS can be used to assess different behavioral tendencies of school going children in Pakistani culture.

### *Limitations and Suggestions*

One of the limitations of the study is that the sample of this study was small to establish validity for the translated and adapted version of CATS. Therefore, further studies should be carried out with larger samples. Moreover, differential relationships of submissiveness, assertiveness and aggressiveness with selected social skills for children from age 3-5 years, depict the validity of the subscales; yet, further exploration with different methods to investigate validity can give more confidence in CATS ability to measure submissiveness, assertiveness and aggressiveness separately. Self-reports from children on other social skills and direct observations can be helpful to establish further validity of the CATS subscales especially for children from age range 3-5 years.

### References

- Anastasi, A., & Urbina, S. (1997). *Psychological testing* (7<sup>th</sup> ed.). NY: Prentice-Hall Publishers.
- Babree, S. (1997). *Aggressive and non-aggressive children's perceptions of parental acceptance-rejection and control*. Unpublished M.Phil dissertation, National Institute of Psychology, Quaid-i-Azam University, Islamabad.
- Briggs, H., Tovar, D., & Corcoran, K. (1996). The children's action tendency scale: Is it reliable and valid with Latino youngsters. *Research on Social Work Practice*, 6, 229-235. Abstract Retrieved April 3, 2009 from <http://rsw.sagepub.com/cgi/content/abstract/6/2/229>
- Coie, J. D., Dodge, K. A., Terry, R., & Wright, V. (1991). Role of aggression in peer relations: An analysis of aggression episodes in boys' play groups. *Child Development*, 62, 812-826.
- Deluty, H. R. (1979). Children's action tendency scale: A self-report measure of aggressiveness, assertiveness, and submissiveness. *Journal of Consulting and Clinical Psychology*, 47(6), 1061-1071.
- Kauffman, J. M. (1985). *Characteristics of children's behavior disorders*. Columbus: Charles E Merrill Publishing Company.

- Franco, D. P., Christoff, K. A., Crimmins, D. B., & Kelly, J. A. (1983). Social skills training for a shy adolescent. In J. J. Cohen (Ed.), *Handbook of school-based interventions: Resolving student problems and promoting healthy educational environment* (pp. 397-398). San Francisco: Jossey – Bass Publishers.
- Griffin, K. W., Nichols, T. R., Birnbaum, A. S., & Botvin, G. J. (2006). Social competence among urban minority youth entering middle school: Relationships with alcohol use and antisocial behaviors [Electronic version]. *International Journal of Adolescent Medical Health*, 18(1), 97-106.
- Groot, M., & Prins, P. (1989). Children's social behavior: Reliability and concurrent validity of two self-report measures. Retrieved September 2, 2009 from <http://www.springerlink.com/content/hh3p8050573168m5/>
- Hammock, G. S., & Richardson, D. R. (1992). Aggression as one response to conflict. *Journal of Applied Social Psychology*, 22(4), 298-311.
- Hargie, O., & Dickon, C. S. (1994). *Social skills in interpersonal communication* (3<sup>rd</sup> ed.). NY: Routledge.
- Jackson, D. N. (1967). *The Personality Research Form Manual*. Goshen, NY: Research Psychologist Press.
- Khan, A. (2005). *Development of social skills scale for children*. Unpublished M.Phil dissertation, National Institute of Psychology, Quaid-i-Azam University, Islamabad.
- King, N. J., Ollendick, T. H., & Gullone, E. (1991). Negative affectivity in children and adolescents: Relations between anxiety and depression [Electronic version]. *Clinical Psychology Review*, 11(4), 441-459
- Kennedy, E., Spence, S. H., & Hensley, R. (1988). *An examination of the relationship between childhood depression and social competence amongst primary school children*. Retrieved August 22, 2009 from <http://www3.interscience.wiley.com/journal/19431741/abstract?CRETRY=1&SRETRY=0>
- Knapczyk, D. R. (1988). Training alternative social responses to reduce aggression. In J. J. Cohen (Ed.), *Handbook of school-based interventions: Resolving student problems and promoting healthy educational environment* (pp. 412-413). San Francisco: Jossey – Bass Publishers.
- Laing A. F., & Chazan, M. (1986). The management of aggressive behavior in young children. In D. P. Tatum. (Ed.), *Management of disruptive pupil behavior in schools* (pp. 91- 92). Chichester: John Wiley & Sons.
- Loona, M. I. (2002). *Academic performance and school social behavior of Attention Deficit Hyperactivity Disorder (ADHD) and non- ADHD children*. Unpublished M. Phil dissertation, National Institute of Psychology, Quaid-i-Azam University, Islamabad.
- Lorr, M., & Youniss, R. P. (1983). *The interpersonal style inventory*. Los Angeles: Western Psychological Services.



- Lorr, M., Youniss, R. P., & Stefic, E. C. (1991). An inventory of social skills. *Journal of Personality Assessment*, 57(3), 506-520.
- McClellan, D. E., & Katz, L. G. (2001). *Assessing young children's social competence*. Retrieved March 20, 2006 from <http://www.athealth.com/Consumer/disorders/ChildSocialSkills.html>.
- McCullough, J. P. (1977). Role-playing using video feedback and self-control training combined with a teacher-coordinated intervention program to control the aggressive school behavior of a sixteen-year-old-male. In M. M. Kerr, & C. M. Nelson (Eds.), *Strategies for managing behavioral problems in the classroom* (2<sup>nd</sup> ed., pp. 237-239). Columbus: Merrill Publishing Company.
- Murphy, K. R., & Davidshofer, C. O. (1994). *Psychological testing: Principles and applications* (3<sup>rd</sup> ed.). NJ: Prentice Hall International.
- Ray, J. R. (1981). Authoritarianism, dominance, and assertiveness [Electronic version]. *Journal of Personality Assessment*, 45(4), 390-397.
- Shehzad, A. (2001). *Social and cognitive competence of adolescents in dual working families*. Unpublished M.Phil dissertation, National Institute of Psychology, Quaid-i-Azam University, Islamabad.
- Thompson, K. L., Bundy, K. A., & Broncheau, K. A. (1995). Social skills training for young adolescents: Symbolic and behavioral components. *Adolescent*, 30(119), 723-734.
- Thompson, C. L., & Rudolph, L.B. (2000). *Counseling children* (5<sup>th</sup> ed.). Sydney: Australia Brooks/ Cole.
- Walker, C. E., & Roberts, M. C. (1992). *Handbook of clinical child psychology* (2<sup>nd</sup> ed.). NY: John Wiley & Sons.
- Wole, J., & Lazarus, A. (1966). *Behavior therapy techniques*. NY: Pergemon.
- Yasmeen, T. (2005). *Relationship between shyness and self-esteem among children*. Unpublished master's thesis, National Institute of Psychology, Quaid-i-Azam University. Islamabad.

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