



Efficacy of a training program to develop Social Competence in Middle Childhood

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Abstract

The objective of the research was to study the effect of an intervention program aimed at increasing Social Competence of 9-12-year-old children. A pre-post, experimental research design was used. Students from Government (150) and Private (150) schools were administered the Interpersonal Competence Scale (Cairns et al 1995). Children scoring low on the scale constituted the sample for the study. They were assigned to two groups – the experimental group [n = 17] which underwent the intervention and the control group [n=19] which did not undergo any intervention. The intervention program consisted of fifteen sessions of about an hour each. Intervention sessions were conducted in groups of four to five each at the schools in which the students were studying. The objectives of the sessions were to improve the self-efficacy, social, communicative and emotional skills. The questionnaire was readministered after the intervention to both the groups to determine the efficacy of the intervention. The results indicate a statistically significant difference [$t= 3.35$ $p < 0.01$] between the pre and post intervention scores for the experimental group, a non significant difference between the pre and post intervention scores of control group [$t=0.239$ p ns] and a statistically significant difference [$t= 3.55$ $p < 0.01$] between the post intervention scores for the experimental and control group, indicating that the intervention to enhance social competence has been highly effective.



1 Introduction

1.1 Social Competence

Social competence refers to the social, emotional, and cognitive skills and behaviors that children need for successful social adaptation. Despite this simple definition, social competence is an elusive concept, because the skills and behaviors required for healthy social development vary with the age of the child and with the demands of particular situations. A socially competent preschool child behaves in a much different manner than a socially competent adolescent; conversely, the same behaviors (e.g., aggression, shyness) have different implications for social adaptation depending upon the age of the child and the particulars of the social context.

A child's social competence depends upon a number of factors including the child's social skills, social awareness, and self-confidence. Social skills is a term used to describe the child's knowledge of and ability to use a variety of social behaviors that are appropriate to a given interpersonal situation and that are pleasing to others in each situation. The capacity to inhibit egocentric, impulsive, or negative social behavior is also a reflection of a child's social skills.

Social competence is the broader term used to describe a child's social effectiveness--a child's ability to establish and maintain high quality and mutually satisfying relationships and to avoid negative treatment or victimization from others.

2 Review of literature

The areas of interpersonal or social competence such as aggression, academic



achievement, popularity, affiliation etc., have been studied across various situations by numerous researchers.

A hostile interaction style directly predicted destructive problem-solving behavior & indirectly predicted family problem-solving effectiveness. A warm interaction style related directly to constructive problem-solving behavior & indirectly to family problem-solving effectiveness(Rueter & Conger, 1995).Similarly Sociability-cooperation was associated with peer acceptance and teacher related competence, whereas aggression was associated with social and school difficulties (Chen; Chen; and Li and He 2005).

On the dimension of popularity, Pakaslahti et al (2002), report that prosocial problem solving strategies & prosocial behavior were only minimally related, but both predicted social acceptance among peers. As a dimension, social popularity correlated positively & rejection negatively with prosocial behavior but not with strategies. Analysis of gender and age differences revealed that girls and 14 year olds achieved higher scores on both prosocial strategies and behavior than boys or 17 year olds. The influence of popularity on later adjustment was investigated by Chen et.al.,(2002). The results indicated that sociability and prosocial orientation had differential significance for later adjustment in different areas. Whereas prosocial orientation made unique contributions to the prediction of educational achievement, sociability in the early years was a significant and reliable predictor of later socioemotional adjustment. Continuity in competence was found by Eisenberg et al (1997) who found that high quality social functioning was predicted by high regulation and low levels of non-constructive coping, negative emotionality and general emotional intensity. Contemporaneous correlations at age 8-10 were similar to those obtained at age 6-8, & prediction of later social functioning from emotionality and regulation at age 4-6 was similar at ages 6-8 & 8-10.

Pomerantz and Rudolph (2003) report that emotional distress predicted negative beliefs about the self and the world over time; these beliefs in turn predicted decrements in competence estimation over time. Negative views of the self and the world mediated the path from emotional



distress to competence underestimation. The findings suggest that the experience of emotional distress has negative implications for children's development.

Investigating the effects of intervention on anxiety Bernstein et.al.,(2005) and Mifsud and Rapee (2005) in separate studies found that both active Cognitive Behavior Therapy treatments were more effective than the no treatment control condition in decreasing child anxiety symptoms and associated impairment. When parent training was combined with child group CBT, there were some additional benefits for the children. School-based early intervention appears to offer an effective means of reducing anxious symptomatology in economically disadvantaged populations. The school environment offers promise as a means of extending the reach of efficacious interventions for mental health to underserved populations.

After exposure to intervention program (Interpersonal Problem-solving training), there were significant differences in pre and post testing performance of experimental group boys (Malik et.al.,2005). Similar findings are reported by Fraser,et.al.(2005) that prevention programs can strengthen social-emotional skills and produce changes in aggressive behavior.

All these findings suggest that adaptive social skills constitute a mechanism through which children express their emotion knowledge and achieve peer acceptance

3 Method

3.1 Objectives

- To study the effect of an intervention program on the social competence of 9-12 year old children.

3.2 Hypotheses

1. Gender and school environment will independently and interactively influence levels of social competence and its constituent sub components.
2. There will be a significant improvement in social competence in the experimental group of children after intervention.



3. Pre-post assessment of the different indicators will show no significant difference in the control group.
4. Post intervention assessments will show significant differences in the experimental and control group on the different indicators.

3.3 Operational definition

- **Social competence:** The ability to apply social-cognitive skills successfully in initiating social interactions, responding positively to peers and resolving interpersonal conflicts.

3.4 Sample

The total sample of 300 children consisted of 150 boys and 150 girls in the age group of 9-12 years. Of these, 75 boys and 75 girls were selected from Government schools and 75 boys and 75 girls were selected from Private schools. All the students were from those studying the state syllabus (SSC).

The intervention sample was determined based on the scores on Social Competence (children with scores below one standard deviation of the mean were selected). There were altogether 66 children -36 boys and 30 girls who obtained low scores. 29 were from the 4th standard, 19 were from the 5th standard and 18 were from the 6th standard. The mean age of the group was 10.51 years with a standard deviation of 1.62. The group consisted of 56% boys and 43% girls, predominantly Hindus, Kannada speaking, youngest borns from nuclear families, with parents who were just matriculates with incomes less than rupees 5000. Of this group, the 18 children from 6th standard could not be included for intervention, as they would no longer fulfill the inclusion criteria (age wise) at the time of intervention.

Table 3.1 showing the demographic details(in percentages) of the sample studied

Sl no	Class	demographic details	percentages
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1	Age	9 years old 10 years old 11years old 12 years old	13.3% 22.3% 24.7% 23.7%
2	Gender	Boys Girls	49.8% 49.8%
3	Religion	Hindu Muslim Christian Others	56.1% 24.3% 4.3% 14.3%
4	Mother tongue	Kannada Tamil Telegu Urdu Hindi Others	29% 11.6% 15.6% 23.4% 3.3% 14.6%
5	Order of birth	Eldest Youngest Middle Only Twin	23% 38% 29.7% 5% 2%
6	Type of family	Nuclear Joint Extended	50.5% 17.6% 18.3%
7	Fathers education	SSLC PUC BA, BCom, BSc BE, MBBS PG < SSLC Double Graduate Diploma	26.2% 4.3% 3.7% .7% .7% 15.3% .7% .3%
8	Fathers income	<5000 5-15000 15-25000 >25000	37.2% 12% 3.7% 2.7%
9	Mothers education	SSLC PUC BA, BCom, BSc BE, MBBS PG < SSLC Double Graduate Diploma	21.6% 5.65% 2.3% 25%
10	Mothers income	<5000 5-15000 15-25000 >25000	17.6% 3.3% 1% .3%

This sample of low scorers was then assigned to two groups - the experimental (intervention) group, which consisted of seventeen children and the control group, which consisted of nineteen children. The number of girls and boys were not equal.



3.5 Tools and techniques

3.5.1. Socio demographic sheet – developed by the researcher to elicit the relevant socio-demographic details such as age, gender, family details, school details.

3.5.2 The Interpersonal Competence Scale (ICS-T) (Cairns et al; 1995) was used to assess Social competence. This is a set of brief rating scales for teachers and parents. It consists of 18 items that assess social and behavioral characteristics of children and youth. Informants are asked to describe the student on each item, which is presented on a unidimensional, 7-point bipolar scale.

Authors of the scales report adequate reliability and validity.

Table 3.2 Showing details of the various subscales

3.6 Procedure

Sno	Questionnaire	Scale	Subscale
1	Interpersonal Competence Scale	Interpersonal Competence	Aggressiveness Academic Achievement Popularity Social Affiliation 'Olympian' qualities Internalizing Problems (This score is not included in the Summed interpersonal competence score)

The Interpersonal Competence Scale was completed by the class teachers of the children.

The data collection was completed in around seven months i.e., February 2005 to August 2005.

The responses obtained were then scored based on the scoring criteria provided by the authors of the different scales.

The intervention sample was determined based on the scores on Social Competence (children with scores below one standard deviation of the mean were selected).

Table 3.3 showing the demographic details (in percentages) of the experimental and control group.



Sl no	Class	Demographic details	Percentages		□2	
			Experimental group	Control group		
1	Gender	Boys	64.7	42.1	1.839	ns
		Girls	35.3	57.9		
2	Religion	Hindu	41.2	21.1	1.791	ns
		Muslim	35.3	52.6		
		Christian	5.9	5.3		
		Others	17.6	15.8		
3	Mother tongue	Kannada	52.9	31.6	4.175	ns
		Tamil	0	10.5		
		Telugu	5.9	0		
		Urdu	35.3	47.4		
		Others	5.9	5.3		
4	Order of birth	Eldest	17.6	5.3	7.883	ns
		Youngest	52.9	31.6		
		Middle	17.6	57.9		
		Only	11.8	0		
5	Type of family	Nuclear	47.1	57.9	3.574	ns
		Joint	17.6	15.8		
		Extended	17.6	5.3		
6	Father's education	SSLC	23.5	36.8	6.055	ns
		PUC	0	5.3		
		BA, BCom, BSc	5.9	0		
		Diploma	5.9	21.1		
7	Father's income	<5000	35.3	52.6	5.305	ns
		5-15000	17.6	15.8		
		15-25000	11.8			
		>25000	5.9			
8	Mother's education	SSLC	23.5	26.3	5.441	ns
		PUC	5.9	10.5		
		BA, BCom, BSc	5.9	0		
		Diploma	17.6	42.1		
9	Mother's income	<5000	17.6	26.3	2.500	ns
		5-15000	5.9	5.3		
		15-25000	5.9	0		
		>25000	5.9	0		

A suitable intervention addressing the relevant areas of socioemotional development was administered to the experimental group.



The exact module for intervention was developed based on the findings of Phase I. However, an eclectic approach was adopted. The intervention included activities from a module developed by Gerard & Gerard (2002) – “Counselling Children” and Rae & Simmons (2004) – “The Anger Alphabet” The intervention model was Group-based and was conducted in the schools. The number of children in a group ranged between 8 – 12. The intervention was carried out thrice a week for about five weeks. The Intervention program consisted of fifteen sessions of about an hour each, in which the various activities were interspersed so that the self-efficacy, social and communicative skills and emotional skills were equally focused upon. The children were tested just before the Intervention began. The tests administered was the Interpersonal Competence scale Teacher form (Cairns et al 1995).

The following table gives details about the sessions

Table 3.4 giving details of activities involved for the intervention

Sl No	Title of activity
1	A, B, Identifying our feelings
2	C, D, Identifying others feelings
3	E, F, Expressing feelings
4	G, H, Discover yourself
5	I, J, Making friends
6	K, L, Being left out
7	M, N, Solving conflicts
8	O, P, Strengths and Limitations
9	Q, R, Chilling out
10	S, T, Consequences
11	U, V, Goals for the future
12	W, X, Sticking up for yourself
13	Y, Z

The Last session was a comprehensive one where the students recapitulated all the activities that had been done previously.



Table 3.5 depicting the duration and rationale of each activity in the Intervention

Sl no	Duration (in minutes)	Name of Activity		Rationale/ purpose
1	5	A is for Anger		To understand that anger is a healthy emotion that every one experiences
	15			To understand the ‘Stop, Think, Reflect’ process
	5	B is for Bottled-Up		How anger is bottled up and how to let it out safely
	15			To identify avenues through which anger can be safely released
	10	Identifying our feelings	Find a feeling	Helps the child to identify particular feelings by relating them to events and situations
	10		Artemus is anxious	Helps the child to consider events, which make him anxious.
2	5	C is for Cool It		To understand bodily changes during anger
	15			To cool down by thinking of cool and calm words
	5	D is for dynamite		To visualize the anger process in terms of a burning fuse leading to an explosion
	15			For each student to understand situations that are real dynamite for them
	10	Identifying others feelings	Guess what?	To help the child to learn to project oneself into situations and guess how others may be feeling.
	10		Your Body	To use observational skills to see how other people use their bodies and expressions on their faces to indicate how they feel.
3	5	E is for Explosion		At some point in time everyone experiences a real anger explosion
	15			To understand and describe the various events that occurred to lead to



Sl no	Duration (in minutes)	Name of Activity		Rationale/ purpose	
				the explosion	
	5	F is for Fuse		To visualize anger in the image of a time bomb	
	15			To identify ways in which the fuse to their anger can be extended sufficiently so that it burns out. To identify ways to help their friend	
	10	Expressing feelings	The Volcano	The process of expression of anger is similar to the workings of a volcano	
	10		Fighting fear with Felix	Encourages the child to explore possible reactions to fear and to look at their own reactions to fear.	
4	5	G is for Grumble Jar		To identify things that make one angry and to set them aside temporarily	
	15			To identify things that one can do to sort out the grumbles set aside previously.	
	5	H is for Helping Yourself		To develop own strategies to manage angry feelings	
	15			To reinforce strategies introduced previously and to reinforce pupils' sense of empowerment and ownership of specific strategies	
	5	Discover yourself	I can do anything	To understand that it is OK to behave differently in different circumstances, and to explore the need to be adaptive and considerate of others	
	5		Where am I?	Allows the child to develop a visual picture of those parts of themselves, which they can comfortably let others see, and those parts of themselves, which they prefer to hide.	
	5		My Choice	To discover how much time the child spends in particular activities and to decide whether changes are required.	
	5	5	I is for ' I' messages		To learn how to talk about one's anger and to explain to others how



Sl no	Duration (in minutes)	Name of Activity		Rationale/ purpose
				one feels.
	15			To identify situations in which they may have needed 'I' messages and to record them
	5	J is for Joke		Anger can be deflected by thinking of something funny
	15			Reinforces the 'stop and do something else' strategy
	10	Making friends	Conversations starters	To think about suitable conversation starters when in new situations and to explore the anxiety related to new situations.
	10		??Questions ??	To use questions and answers in initiating conversations and also to learn how to listen and to take turns
6	5	K is for Kettle Boiling		To understand how getting angry is similar to a boiling kettle
	15			Reinforces the importance of avoiding anger explosions and introduces another anger management strategy
	5	L is for Listening		Listening to calming music, to our own thoughts and also learning how to listen helps prevent anger.
	15			To reinforce the notion that music can calm us.
	10	Being left out	Advice for Jim	Explore reactions to being left out.
	10		Gumbo gossips	To understand how gossiping damages social relationships
7	5	M is for Move it!		Exercise can help release angry feelings and reduce levels of stress
	15			To identify activities that help to reduce anger and release feelings of frustration.
	5	N is for No		One can be in control of situations that trigger anger by remaining calm,



Sl no	Duration (in minutes)	Name of Activity		Rationale/ purpose
				and making it clear to others how their actions are provoking anger.
	15			Gives children the opportunity to think about and rehearse their 'No' messages.
	10	Solving conflicts	Fighting!	To think about possible reasons why fights occur
	10		Terry, Tyrone and Me	To explore different ways of responding to conflict
8	5	O is for outside		Physically moving away from an angry situation is a good way to calm down
	15			To identify the physical signs of anger and to understand how to apply some of the calming strategies.
	5	P is for Post It		Writing things down to be dealt with later is a useful way to manage anger
	15			To understand situations that can be dealt with at a later time.
	5	Strengths and Limitations	Inside out	Allows the child to identify 3 separate components of themselves: their body, their emotional feelings and their thoughts
5	News Head lines		Gives the child an opportunity to process a negative experience but to focus on the positive outcomes of that experience	
5	Jump the hurdle		Encourages the child to be flexible in their thinking	
9	5	Q is for Quality Talk		Sharing a problem is one way of dealing with it
	15			To understand that solutions should be realistic and that if one solution



Sl no	Duration (in minutes)	Name of Activity		Rationale/ purpose
				does not work another solution should be thought of.
	5	R is for Rules		Anger is normal and healthy, it is what one does with anger that needs to be controlled
	15			To understand that rules are important for safety, both, for oneself and for others.
	10	Chilling out	Look before you leap	To understand the concept of ‘STOP, THINK and DO’
	10		Choices and Options	To explore the consequences of different actions which can be taken at different points in time
10	5	S is for Shield		Appropriate thoughts can provide a shield against anger
	15			How to use positive statements, and also in the present tense.
	5	T is for Traffic Lights		To apply the simile of traffic lights to identify their problem, plan a solution and implement it.
	15			To identify triggers to anger, take time to plan solutions and then try them out.
	10	Consequences	If – then - but	To explore both the positive and negative consequences of particular behaviors
	10		Crime & Punishment	To explore the appropriateness of consequences and punishments for certain behaviors.
11	5	U is for Understanding		To understand one’s feelings, and the behaviors which may result from those feelings
	15			To help the students understand how their feelings are similar to those of others and also how the feelings are different
	5	V is for Vocabulary		To describe accurately what one is feeling



Sl no	Duration (in minutes)	Name of Activity	Rationale/ purpose
	15		To reinforce the fact that anger is person specific and not every situation will cause one to feel the same level of anger.
	5	Goals for the future	Balance your life Gives the child a picture of how their day is divided and how to achieve a more satisfactory balance
	5		These are my wishes Helps the child to fantasize about what they would like in the present, in the near future and in the long term.
	5		Picture yourself To identify what they have achieved, and want to achieve, and who or what they need to help them achieve their goal
12	5	W is for Wind Down.	Giving oneself time to relax and calm down is another anger management strategy.
	15		To identify ways that one prefers to relax in.
	5	X is for X-ray eyes	To use understanding of ones own anger to identify other people's feelings
	15		To help identify the indicators of anger in others.
		Sticking up for yourself	Saying 'No'.... made easy
			Reward yourself
13	5	Y is for Yell	Yelling is a useful way to get rid of angry feelings
	15		To identify situations and places when yelling may be a useful strategy in controlling anger.
	5	Z is for Zero	To visualize an anger thermometer or a tension Scale, and how to move down it.
	15		To facilitate the students in the appropriate use of the tension scale to resolve an angry problem.



4. Analysis

4.1 Analysis of results

Children in the age group of 9 to 11 years, from various schools in Bangalore were assessed on Social Competence. The data obtained was subjected to qualitative and quantitative analysis. Appropriate Univariate and Multivariate statistical techniques were applied to verify the hypothesis stated.

Hypothesis 1 states: *“Gender and school environment will independently and interactively influence levels of social competence and its constituent sub components”*. To test this a two-way ANOVA was done and the results are presented in table 4.1.1 and table 4.1.2

Table 4.1.1: Giving the descriptive measures for the Social Competence Scale and its subscales.

Sl No	Areas Assessed/ Scales	Descriptive Statistics	Boys		Girls		Total	
			Private	Govt	Private	Govt	Private	Govt
1	Interpersonal Competence	Mean	4.25	4.36	4.76	4.51	4.50	4.44



Sl No	Areas Assessed/Scal es	Descriptiv Statistics	Boys		Girls		Total	
			Privat e	Govt	Private	Govt	Private	Govt
		Type of School						
		SD	0.78	0.85	0.78	0.93	0.82	0.89
		Total	4.30 (SD 0.82)		4.64 (SD 0.87)		4.47 (SD 0.86)	
2	Aggressiveness	Mean	4.24	4.28	5.09	4.39	4.66	4.33
		SD	1.14	1.37	1.16	1.68	1.22	1.53
		Total	4.26 (SD 1.25)		4.74 (SD 1.48)		4.50 (SD 1.39)	
3	Popularity	Mean	4.08	4.37	4.69	4.74	4.39	4.55
		SD	1.18	1.37	0.95	1.53	1.11	1.46
		Total	4.23 (SD 1.28)		4.71 (SD 1.27)		4.47 (SD 1.30)	
4	Academic Achievement	Mean	3.92	4.54	4.60	3.99	4.26	4.27
		SD	1.46	1.66	1.51	1.83	1.52	1.76
		Total	4.23 (SD 1.59)		4.30 (SD 1.70)		4.26 (SD 1.64)	
5	Social Affiliation	Mean	4.88	4.45	5.01	5.08	4.95	4.77
		SD	1.21	1.67	1.06	1.65	1.14	1.68
		Total	4.67 (SD 1.47)		5.05 (SD 1.38)		4.86 (SD 1.44)	
6	‘Olympian’ qualities	Mean	4.11	4.17	4.42	4.35	4.27	4.26
		SD	1.11	1.20	1.18	1.51	1.15	1.36
		Total	4.14 (SD 1.15)		4.38 (SD 1.35)		4.26 (SD 1.26)	

Table 4.1.2 Giving the results of the two-way ANOVA for Social Competence Scale and its subscales



Sl No	Variable		MS among Mean Square	MS within Error	F
1	Interpersonal Competence	Gender	8.256	.705	11.717 (.001)**
		Type of School	.358		.508 (.476) ns
		Interaction	2.515		3.569 (.060) ns
2	Aggressiveness	Gender	17.601	1.836	9.586 (.002)**
		Type of School	8.113		4.418 (.036)*
		Interaction	10.083		5.492 (.020)*
3	Popularity	Gender	17.926	1.624	11.038 (.001)**
		Type of School	1.974		1.215 (.271) ns
		Interaction	1.080		.665 (.415) ns
4	Academic Achievement	Gender	.285	2.631	.108 (.742) ns
		Type of School	.005208		.002 (.965) ns
		Interaction	28.060		10.664 (.001)**
5	Social Affiliation	Gender	10.925	2.025	5.394 (.021)*
		Type of School	2.385		1.178 (.279) ns
		Interaction	4.502		2.223 (.137) ns
6	'Olympian' qualities	Gender	4.400	1.585	2.776 (.097) ns
		Type of School	.005926		.004 (.951) ns
		Interaction	.290		.183 (.669) ns

** ----- Significant beyond .01 level

* ----- Significant beyond .05 level

ns ----- not Significant

Social Competence, as assessed by the Interpersonal Competence Scale shows that there are significant gender differences with girls displaying greater Interpersonal Competence than boys.

Aggression, one of the sub areas of Interpersonal Competence shows significant differences across gender and school with girls being more aggressive and private school children being more aggressive than their counterparts. We can also see interactive effects of gender and school with private school girls being most aggressive and private school boys being least aggressive. Government schoolgirls are less aggressive than the private school



girls. Government schoolboys showed levels of aggression greater than the private school boys but lesser than the government schoolgirls.

Two other sub areas of Interpersonal Competence, popularity and social affiliation show significant gender differences with girls showing higher levels of popularity and affiliation than boys.

Academic achievement, another sub area of Interpersonal Competence reflects significant interactive effects of gender and school with girls from private schools showing highest levels of academic achievement, followed by government school boys followed by government school girls and lastly private school boys.

Hypothesis 1stating: *“Gender and school environment will independently and interactively influence levels of Social Competence and its constituent sub components”* has also been proved true. This hypothesis receives support from a study on ‘Social functioning and academic achievement in the context of the peer group’ conducted by Chen et al in 2002. Peer groups were homogenous on academic achievement. Academic achievement and social adjustment were associated at both within group individual level and group level. Group academic performance moderated the relations between academic achievement and social adjustment suggesting that individual-level relations might be enhanced or exacerbated by group academic norms. The objective of phase II was to conduct an intervention program to enhance the social competence in middle childhood. Individuals scoring one Standard Deviation below the mean on the Interpersonal Competence Scale (Cairns et al, 1995) were selected for the intervention. Seventeen children comprised the experimental group and nineteen children comprised the control group; the number of boys and girls was not equal.

Prior to the intervention, the experimental and control group were compared on their scores on social competence. This was done to ensure that differences if any, found after the intervention could be attributed to intervention itself and not to existing differences.

Table 4.1.3 gives the results of the analysis.



Table 4.1.3 showing the t ratios for scores on social competence for the experimental and control group, prior to intervention

Sl no	Variable	Experimental (17)		Control (19)		't' ratio
		Mean	SD	Mean	SD	
1	Social Competence	3.994	.272	3.80	.362	1.82 ns

ns = not significant

As the 't' ratios are non significant, the two groups are comparable on social competence prior to intervention.

Hypothesis 2 stated: "There will be a significant improvement in social competence in the experimental group of children, after intervention." To test this, pre and post intervention assessments were compared using the paired 't' test and the results are presented in table 4.1.4

Table 4.1.4 showing the Pre and Post Intervention Scores of the Experimental group and paired 't' test values

Sl no	Variable	Pre		Post		't' test
		Mean	SD	Mean	SD	
1	Social Competence	3.994	.272	4.28	.393	3.35 **

** significant beyond .01 level of significance

Perusal of the table indicates that significant improvement can be seen in the social competence. The scores have changed in the expected direction. Social competence has increased. Hence hypothesis 2 stating "There will be a significant improvement in social competence in the experimental group of children subjected to the intervention" is accepted, as there is significant improvement in social competence of the experimental group after administration of intervention.

To verify if the differences that had emerged were truly because of the intervention and not due to normal changes over time, the responses of the control group were compared, pre and post intervention.



Hypothesis 3 stated: “Pre-post assessment of social competence will show no significant difference in the control group”. Data was analyzed using a paired ‘t’ test and the results are presented in table 4.1.5

Table 4.1.5 showing the Pre and Post Intervention Scores of the Control group and paired ‘t’ test values

Sl no	Variable	Pre		Post		‘t’ test
		Mean	SD	Mean	SD	
1	Social Competence	3.80	.362	3.78	.450	0.239 ns

ns = not significant

The non-significant ‘t’ ratios obtained for the control group reveal that there are no changes in the scores for these variables, due to time. Thus hypothesis 3 stating, “There will be no difference in social competence in the control group” is accepted.

These results were further verified by comparing the scores of the experimental and control group, after intervention.

Hypothesis 4 stated that “Post intervention assessments will show significant differences in the experimental and control group on the different indicators”. The results of an independent groups ‘t’ test are presented in table 4.1.6.

Table 4.1.6 showing the ‘t’ ratios for scores on social competence for the experimental and control group, after the intervention

Sl no	Variable	Experimental (17)		Control (19)		‘t’ ratio
		Mean	SD	Mean	SD	



1	Social Competence	4.28	.393	3.78	.450	3.55**
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** significant beyond .01 level of significance

As both the ‘t’ ratios are highly significant, they indicate that the two groups – experimental and control differ on their scores, after the intervention. Looking at the table, it is clear that the experimental group has higher scores on social competence.

All these results put together therefore indicate that the intervention has been effective in bringing about an increase in the social competence scores of the experimental group. This further proves that the intervention was successful in improving social competence in the experimental group. These findings are supported by Fraser et.al (2005) who report that prevention programs can strengthen social-emotional skills and produce changes in aggressive behavior. Malik et.al (2005) also report that after exposure to an intervention program, there were significant differences in pre and post testing performance on social problem-solving skills of experimental group of boys.

5 Discussion

5.1 Social Competence

Social competence (composite score) and the sub score of Popularity and Affiliation show significant gender differences with girls being more socially competent and popular than boys. These findings are in the generally expected direction as females are more relationship oriented than males and hence show higher social skills. Pakaslahti, Laura et al (2002) report results, which are similar to the findings of the present study. They state that as a dimension, social popularity correlated positively & rejection negatively with prosocial behavior but not with strategies. Analysis of Gender & Age differences revealed that the girls & the 14 year olds achieved higher scores on both prosocial strategies & behavior than the boys or the 17 year olds.

The sub score of aggression show significant gender, school and interactive effects of



gender and school. The girls are more aggressive than the boys. These findings appear to be contrary as boys are generally expected to be more aggressive. But the findings may be a reflection of the present social scenario in which girls are not as bound by traditional stereotypes as previously. Hence they may be less inhibited and submissive. Private school children are more aggressive. The interaction effects show that the private school girls are the most aggressive, slightly less aggressive are the government girls. The least aggressive are the private school boys.

On the sub score of academic achievement interactive effects of gender and school can be seen. The highest academic achievers are the private school girls followed by government school boys. Next are the government school girls and the least academic achievers are the private school boys. These results again reflect the greater industry that girls show towards academic activities. But the government school boys show more academic achievement than the government school girls. The boys may be applying themselves more assiduously as they perceive education to be the gateway to a better life.

5.2 Intervention

Analysis showed that scores on the Interpersonal Competence Scale (Cairns et al, 1995) clearly discriminated the individuals scoring high and low on social competence. Thus individuals scoring one Standard Deviation below the mean on the Interpersonal Competence Scale (Cairns et al, 1995), were selected for the intervention.

A group-based intervention was administered to the experimental group. The intervention addressed areas of social competence. The intervention package was adapted from modules developed by Gerard and Gerard (2002) and Rae and Simmons (2004).

Prior to intervention, comparison of scores on social competence for the experimental and control group had revealed that the two groups were comparable. Post intervention analysis



yielded significant differences between the two groups.

This implies that by addressing the areas of social competence there can be an improvement in the social competence of children. Social competence implies skill in interpersonal relationships whether at home, school or among peers. By gaining an understanding of these skills, a child learns not only how to behave in any situation but also the dynamics of the situation. With perception, comes understanding and with understanding comes adjustment. Other researches, as delineated in the review have also found the beneficial effects of intervention at this stage of life. These results therefore underscore the importance of and effectiveness of intervention strategies to equip our young children with skills to adjust to their environments.

6 Summary

6.1 Conclusions

- Gender and type of school significantly affect Social Competence. Girls showed more Social competence compared to boys, and Private school students had higher aggressive scores.
- There is significant improvement in social competence of the experimental group after administration of intervention.
- There is no difference in the social competence in the control group.
- Post intervention assessments show significant differences in the experimental and control group on the different indicators.

6.2 Limitations

- The study used one source of information – Self reports by children .
- Only students studying State syllabus were studied.

6.3 Suggestions for future research



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- Reports by parents, siblings and peers could also be included
 - Comparisons of different streams of Syllabus i.e., ICSE, CBSE may yield further information.

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