Prosocial Behaviour among Senior Secondary School Students in Relation to their Home Environment

Mihir Kumar Mallick and Simranjit Cour

School of Education, Lovely Professional University, Phagwara, Punjab, India.

ABSTRACT

Prosocial behavior is any act performed with the goal of benefiting another person. It is the action to benefit other people like the act of donating, helping, cooperating, volunteering and sharing. Prosocial behavior develops gradually as a process of socialization.. Home appears to have positive influence in developing socialized traits of a child. Prosocial behavior of course has its roots in our social upbringing which starts at home. Keeping in view the importance of home environment as a factor to induce pro-social behavior among children, it was thought to conduct the study. The purpose of the study was to explore the prosocial behaviour of the senior secondary school students and to find out how home environment could be influencing the same. Descriptive survey method was used in this study to obtain pertinent and precise information. The sample of the study included 200 senior secondary school students selected by using simple random sampling technique from Jalandhar and Hoshiarpur districts of Punjab. For the purpose of drawing out the results, the investigator used statistical techniques like correlation, t-test, mean and standard deviation along with graphical presentations. The study revealed that there exists no significant difference between the senior secondary school boys and girls in their prosocial behaviour. Among the senior secondary boys and girls no significant difference in control, protectiveness and permissiveness dimensions of home environment was found. The study also revealed that there exists positive relationship between prosocial behavior and home environment dimensions like control, deprivation of privileges, nurturance and permissiveness of the senior secondary school students. However, prosocial behaviour of the senior secondary school students is not positively influenced by the home environment in protectiveness, punishment, conformity, social isolation, and reward and rejection dimensions.

Keywords: Prosocial behavior, home environment & senior secondary school students.

Prosocial behavior is the behavior that is intended to help others. This behavior is characterized by concern about the feelings, welfare and rights of the others. The behaviors which may be described as prosocial behavior include concern for

Access this article online						
Publisher	Website: http://www.ndpublisher.in					
\mathcal{N}	DOI: 10.5958/2230-7311.2015.00014.8					

others, empathy and behaving in various ways to help others. The prosocial behavior is a voluntary behavior shown and made with an intention of helping and benefiting others (Eisenberg & Fabes, 1998). Prosocial behavior consists of actions concerning for the benefit of the other people or the society at large like sharing, helping, volunteering, cooperating, and donating. These actions may be motivated by empathy and for concern for welfare of others and their rights. The prosociality is the heart for the good and well being of the society. According to CD Batson (1998), the social scientists created the term prosocial behavior as an antonym for the term anti-social. Malti et al.

Address for correspondence

School of Education, Lovely Professional University, Phagwara, Punjab, India,

E-mail: mihir.mallick@gmail.com

Submission: 15 April, 2014 Accepted : 3 June, 2015 Published: 30 August, 2015

(2009) had investigated two studies which were about role of children's sympathy and moral motivation in the prosocial behavior. The study one reported sympathy and the study two measured other reported prosocial behavior and self.

A home is a place in which a family or an individual can be able to store personal property and can relax and rest. Home environment refers to aspects of peoples' domestic lives that contribute to their living conditions. These factors may be social circumstances, physical circumstances, suburban environments and urban environments. Parental involvement is critical to a child's success in both school and in life has been said alike by the researchers and teachers (Dearing, Kreider, Simpkins, and Weiss, 2006). The child's first teacher is the parents' and most experiences of literacy that a child brings to school are born out of the context of that child's home environment (Heath, 2001). The family's involvement and support are very important and crucial to a child's educational development. Prosocial behavior of an individual develops as one interacts with others. Home appears to have positive influence in developing socialized traits of a child. Prosocial behavior of course has its roots in our social upbringing which starts at home. Keeping in view above considerations; this research problem was undertaken with an interest to further explore the prosocial behavior of the senior secondary school students and to determine the influencing factors specifically focusing the home environment.

Objectives of the Study: The study was conducted to achieve the following objectives.

- (i) To explore the prosocial behaviour and home environment of the senior secondary school students.
- (ii) To study the difference between senior secondary

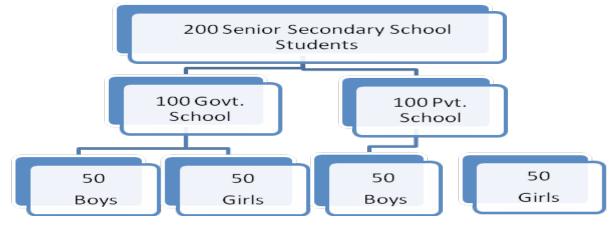
- school boys and girls in their prosocial behaviour and home environment.
- (iii) To find out the difference between government and private senior secondary school students in their prosocial behaviour and home environment.
- To study the relationship between prosocial behaviour and home environment of the senior secondary school students.

Hypotheses: The following hypotheses were framed to achieve the set objectives:

- (i) There exists no significant difference between the senior secondary school boys and girls in their prosocial behaviour.
- (ii) There exists no significant difference between the senior secondary school boys and girls in their home environment.
- (iii) There exists no significant difference between the government and private senior secondary school students in their prosocial behaviour.
- (iv) There exists no significant difference between the government and private senior secondary school students in their home environment.
- (v) There exists positive relationship between prosocial behaviour and home environment of the senior secondary students.

Design of the Study: The study undertaken was of descriptive in nature. Simple random sampling technique was applied for selection of the sample of the study. The sampling structure is presented below:

Sampling Structure



Tools Used: The following tools were used in the study:

- Home environment Inventory by Dr. Karuna Shankar Mishra (2004).
- 2. Prosocial Behaviour assessment scale constructed and standardized by the researcher

Results and Discussion

In order to achieve the framed objectives of the study, the collected data were analyzed with the help of various statistical techniques. The presentation of analysis and interpretation of data is discussed as follow:

Result relating to status of senior secondary school students in prosocial behavior:

Table 1. Data relating to Prosocial Behaviour of the senior secondary school students

Types of School	Gender	N	Mean Score
	Boys	50	225.5
Private	Girls	50	225
	Boys And Girls (Total)	100	225
	Boys	50	169.5
Government	Girls	50	180.5
	Boys And Girls (Total)	100	159.5

The above table shows the data of senior secondary school students in their prosocial behaviour. A look at the above table reflects that the mean scores of the private senior secondary schools boys and girls are 225.5 and 225 respectively. The mean scores of government senior secondary school boys and girls are 169.5 and 180.5 respectively. Based on the test norm, it is observed that both boys and girls of the private senior secondary schools belong to average category in prosocial behavior. This indicates that private senior secondary school boys and girls are moderately motivated to help others without looking for one's own self interest and benefit. They are moderately benevolent. The government senior secondary school boys and girls belong to low category in prosocial behavior. This indicates that government senior secondary school boys and girls have very low drive to help others. Rather than helping others unconditionally, they always expect something in return in terms of a reciprocal relationship.

Result relating to status of senior secondary school students in Home Environment:

Table 2. Data relating to Home Environment of the senior secondary school students

Home Environment (Dimensions)	Types of School	Gender	N	Mean Scores
Control	Private	Boys	50	18
		Girls	50	16
	Government	Boys	50	19.5
		Girls	50	24.5
Protectiveness	Private	Boys	50	14.5
		Girls	50	23
	Government	Boys	50	30.5
		Girls	50	30.5
	Private	Boys	50	19.5
Punishment		Girls	50	13.5
	Government	Boys	50	27
		Girls	50	27
	Private	Boys	50	18
Conformity		Girls	50	20.5
	Government	Boys	50	31
		Girls	50	35.5
	Private	Boys	50	18.5
Social Isolation		Girls	50	5.5
	Government	Boys	50	15.5
		Girls	50	12
	Private	Boys	50	18.5
Reward		Girls	50	19.5
	Government	Boys	50	37.5
		Girls	50	30.5
	Private	Boys	50	15.5
Deprivation of Privileges		Girls	50	14.5
	C	Boys	50	10.5
	Government	0073	30	10.5

	Private	Boys	50	13
Nurturance		Girls	50	17
	Government	Boys	50	28
		Girls	50	24
	Private	Boys	50	11
Rejection		Girls	50	5
	Government	Boys	50	2
		Girls	50	6
	Private	Boys	50	17
Permissiveness		Girls	50	21
	Government	Boys	50	29.5
		Girls	50	22.5

Table no. 2 shows the data of government and private senior secondary school students in their home environment. A look at the above table reflects that in control dimension of home environment, the mean scores of private senior secondary school boys and girls are 18 and 16 respectively and mean scores of government senior secondary school boys and girls are 19.5 and 24.5 respectively. By following the test manual, it is observed that in control dimension of home environment, the private senior secondary school boys and girls and government senior secondary school boys belong to average category and government secondary school girls belong to high category. This data portrays that in comparison to private senior secondary school boys and girls and government senior secondary school boys, the government senior secondary school girls possess high degree of control at their home. Their home environment has an autocratic atmosphere in which many restrictions are imposed on them by parents in order to discipline them.In protectiveness dimension of home environment, the mean scores of private senior secondary school boys and girls are 14.5 and 23 respectively and mean scores of both government senior secondary school boys and girls is 30.5 which indicates that the private senior secondary school boys belong to low category and the girls fall on average category and government senior secondary school boys and girls belong to high category in protectiveness dimension of home environment. So it appears that government senior secondary school boys and girls experience high protectiveness at home by their parents. There is prevention of independent behavior and prolongation in infantile care leading to extra protectiveness at home by the parents.

In punishment dimension of home environment, mean scores of private senior secondary school boys and girls are 19.5 and 13.5 respectively and mean scores of both government senior secondary school boys and girls is 27. This reflects that the private senior secondary school boys and girls belong to low category and government senior secondary school boys and girls belong to above average category in punishment dimension of home environment. This indicates that boys and girls of government senior secondary schools are more prone to punitive measures by parents and family at home in order to discipline them in comparison to private senior secondary school boys and girls. In conformity dimension of home environment, the mean scores of private senior secondary school boys and girls are 18 and 20.5 respectively and mean scores of government senior secondary school boys and girls are 31 and 35.5 respectively. In accordance to the test manual, it is observed that private senior secondary school boys and girls belong to low category, government senior secondary school boys belong to above average category, government senior secondary school girls belong to very high category in conformity dimension of home environment. Hence it can be stated that government senior secondary school girls have to conform all the time to their parents at home even if they are compliant to what is asked from them to do comparatively to private senior secondary school boys and girls and government secondary school boys who experience moderately low conformity at home which mean they can voice their opinion at home and they don't have to blindly agree to whatever they are told to do.

In social isolation dimension of home environment, the mean scores of private senior secondary school boys and girls are 18.5 and 5.5 respectively and mean scores of government senior secondary school boys and girls are 15.5 and 12 respectively. The above data makes it clear that government senior secondary school boys and girls have been left more isolated from beloved ones except family members for negative sanctions comparably to private senior secondary school boys and girls who are still allowed sometimes to socially interact with people.

In reward dimension of home environment, the mean scores of private senior secondary school boys and girls are 18.5 and 19.5 respectively and mean scores of government senior secondary school boys and girls are 37.5 and 30.5 respectively. It appears that government senior secondary

school boys always get material as well as symbolic rewards at home by parents for appreciating their good behavior and for repetition of certain desired expected behaviors in comparison to the private senior secondary school boys and girls and government senior secondary school girls who sometimes get rewards as a token of admiration and appreciation. In deprivation of privileges dimension of home environment, the mean scores of private senior secondary school boys and girls are 15.5 and 14.5 respectively and mean scores of government senior secondary school boys and girls are 10.5 and 9.5 respectively. The score infers that the private senior secondary school boys and girls are more deprived of certain privileges at home as their parents want to have control on them or their rights to seek love, respect and childcare comparatively to the moderate home environment in deprivation of privileges of government secondary school boys and girls where sometimes their parents provide them with certain privileged amenities.

In nurturance dimension of home environment, the mean scores of private senior secondary school boys and girls are 13 and 17 respectively and mean scores of government senior secondary school boys and girls are 28 and 24 respectively. This portrays that government senior secondary school boys have high level of nurturance at home with existence of excessive unconditional physical and emotional attachment of parents with them at home. Their parents have high degree of mental and emotional bonding with them comparably to private senior secondary school boys and girls and government senior secondary school girls who experience low nurturance in the form of physical and emotional care at home.

In rejection dimension of home environment, the mean scores of private senior secondary school boys and girls are 11 and 5 respectively and mean scores of government senior secondary school boys and girls are 2 and 6 respectively. The above data reflects that the private senior secondary school boys and girls and government senior secondary school girls have more conditional recognizing that they have no rights as a person, no right to express their feelings, no right to uniqueness and no right to become an autonomous individual comparably to government senior secondary school boys. Often they are not

accepted for their individuality. In permissiveness dimension of home environment, the mean scores of private senior secondary school boys and girls are 17 and 21 respectively and mean scores of government senior secondary school boys and girls are 29.5 and 22.5 respectively. This indicates that the private senior secondary school boys belong to average category, private senior secondary school girls and government senior secondary school girls belong to high category, government secondary school boys belong to very high category in permissiveness dimension of home environment.

Result relating to difference between senior secondary school boys and girls in prosocial behavior:

Table 3. Difference between senior secondary school boys and girls in Prosocial Behavior

Gender	N	Mean Score	S.D	SED	t-value	_	el of ficance		
		Score			30010			0.01	0.05
Boys	100	183.5	57.28	9.16	1.09	N.S	N.S		
Girls	100	173.5	71.42						

(N.S= Not Significant; Tabulated t-value at 0.01 level is 2.60 and at 0.05 level is 1.97)

Table 3 shows the group difference between senior secondary school boys and girls in their prosocial behavior. A look at the above table reflects that the t-value is 1.09. which is found to be less than the table values at both 0.01 and 0.05 level. This indicates that, the t-value is found to be not significant both at 0.01 and 0.05 level of significance. On the basis of the above finding, it can be said that there is no significant difference between senior secondary boys and girls in their prosocial behavior. The above finding supports to accept the hypothesis no.1, i.e. "There exists no significant difference between the senior secondary school boys and girls in their prosocial behaviour".

Result relating to difference between senior secondary school boys and girls in Home Environment:

Table 4. Difference between senior secondary school boys and girls in Home Environment

Dimensions	Gender	z	Mean	S.D	SED	t-value		el of ficance	
	ဖိ		Σŏ		0,	1	0.01	0.05	
Control	Boys	100	13	5.66	3.48	1.29	N.S	N.S	
	Girls	100	17.5	12.02					
Protective-	Boys	100	18	12.73	4.39	1.02	N.S	N.S	
ness	Girls	100	22.5	17.68					
Punishment	Boys	100	17	8.49	0.93	3.23	S	S	
	Girls	100	20	14.14					
Conformity	Boys	100	20	14.14	2.05	2.68	S	S	
	Girls	100	25.5	14.85					
Social	Boys	100	15.5	2.12	0.54	16.67	S	S	
Isolation	Girls	100	6.5	4.95					
Reward	Boys	100	26	19.80	2.32	4.09	S	S	
	Girls	100	16.5	12.02					
Deprivation	Boys	100	9.5	7.78	1.26	3.57	3.57 S		
of Privileges	Girls	100	14	9.9					
Nurturance	Boys	100	21.5	13.44	1.76	6.53	.53 S	S	
	Girls	100	10	11.32					
Rejection	Boys	100	8	5.66	0.57 2.63	0.57 2.63	S	S	
	Girls	100	6.5	0.71					
Permissive-	Boys	100	20.5	14.85	1.59	0.94	0.94 N.S	N.S	
ness	Girls	100	19	5.66					

(N.S= Non-significant, S= Significant; Tabulated t-value at 0.01 level is 2.60 and at 0.05 level is 1.97)

Table no.4 shows the group difference between senior secondary school boys and girls in different dimensions home environment. A look at the above table reflects that the calculated t- values in dimensions namely, punishment, conformity, social isolation, reward, deprivation of privileges, nurturance and rejection are found to be significant both at 0.05 and 0.01 level of significance. However, in the dimensions namely permissiveness, protectiveness, and control the calculated t- values are found insignificant both at 0.05 and 0.01 level of significance. The above finding supports to accept the hypothesis no. 2, i.e. "There exists no significant difference between senior secondary boys

and girls in their home environment" and is thus, accepted and there is significant difference between senior secondary boys and girls in punishment, conformity, social isolation, reward, deprivation of privileges, nurturance and rejection dimensions of home environment. The above findings support to reject the hypothesis no. 2, i.e. "There exists no significant difference between senior secondary school boys and girls in their home environment".

Result relating to difference between government and private senior secondary school students in their Prosocial Behaviour

Table 5. Difference between government and private senior secondary school students in Prosocial Behaviour)

School	z	Mean Score	S.D	SED	t-value		el of icance
_ Z s					+	0.01	0.05
Government	100	225	1.41	5.16	12.69	S	S
Private	100	159.5	51.62				

S= Significant; tabulated t-value at 0.01 level is 2.60 and at 0.05 level is 1.97

Table no. 5 shows the group difference between government and private senior secondary school students in their prosocial behaviour. The above table indicates that the calculated t-value is 12.69. The table t-value at 0.01 and 0.05 level of significance with df 198 are 2.60 and 1.97. The obtained t- value is found to be more than the table values both at 0.01 and 0.05 levels. This indicates that, the t-value is found to be significant both at 0.01 and 0.05 level of significance. The above finding supports to reject the hypothesis no.3, i.e. "There exists no significant difference between the government and private senior secondary school students in their prosocial behaviour".

 Result relating to Difference between government and private senior secondary school students in Home Environment

Table 6. Difference between Government and Private Senior Secondary school students in Home Environment)

Dimensions of Home	Types of School	N	Mean	S.D	SED	t-value	Level of significance		
Environment	Types or School	IN	Score	3.0	SED	1-value	0.01	0.05	
Control	Government	100	16	9.9					
	Private	100	24	2.83	1.03	7.77	S	S	
	Government	100	22.5	19.09					
Protectiveness	Private	100	34.5	0.71	2.03	5.91	S	S	
	Government	100	14	4.24					
Punishment	Private	100	30.5	0.71	4.30	3.84	S	S	
	Government	100	18	11.31					
Conformity	Private	100	34	2.83	1.17	13.68	S	S	
	Government	100	13	14.14			N.S	N.S	
Social Isolation	Private	100	12	2.83	1.44	0.69			
	Government	100	21.5	13.44					
Reward	Private	100	25	7.07	1.52	2.30	N.S	N.S	
Deprivation of Privileges	Government	100	11.5	4.95			N.S	N.S	
	Private	100	12	7.07	0.87	0.57			
Nurturance	Government	100	22	14.14	1.5	0.33	N.S	N.S	
	Private	100	21.5	4.95					
	Government	100	8	5.66	0.75	6	S	S	
Rejection	Private	100	3.5	4.95					
	Government	100	18.5	12.02	1.25	5.6	S	S	
Permissiveness	Private	100	25.5	3.54					

(N.S= Non-significant, S= Significant; Tabulated t-value at 0.01 level is 2.60 and at 0.05 level is 1.97)

Table no. 6 shows the group difference between government and private senior secondary school students in their home environment. The above table portrays that in dimensions namely permissiveness, rejection, conformity, punishment, control, and protectiveness the calculated t- values are found significant both at 0.05 and 0.01 level of significance. However, in the dimensions namely, nurturance, deprivation of privileges, social isolation and reward the calculated t- values are found insignificant both at 0.05 and 0.01 level of significance. Based on the above stated finding it can be stated that in home environment both significant and non-significant differences

among the Government and private senior secondary school students are found on different dimensions. Thus it can be stated that the hypothesis no.4 i.e "There exists no significant difference between the government and private senior secondary school students in their home environment" is thus, upheld.

Result relating to Relationship between Prosocial behaviour and Home environment of senior secondary school students

Table 7. Relationship between Prosocial Behaviour and Home Environment of SeniorSecondary school students

Varia	bles		
Variable 1	Variable 2 (Independent)	N	Co-efficient of
(Dependent)	Home Environment (Dimensions)		Correlation
Prosocial Behaviour	Control	200	0.12
	Protectiveness	200	-0.18
	Punishment	200	-0.22
	Conformity	200	-0.12
	Social Isolation	200	-0.44
	Reward	200	-0.14
	Deprivation of Privileges	200	0.18
	Nurturance	200	0.07
	Rejection	200	-0.14
	Permissiveness	200	0.5

The above table shows the co-efficient of correlation between prosocial behaviour and home environment of the senior secondary school students. A look at the above table reflects that the co-efficient of correlation of prosocial behavior with various dimensions of home environment namely, control, protectiveness, punishment, conformity, social isolation, reward, deprivation of privileges, nurturance, rejection and permissiveness are 0.12, -0.18, -0.22, -0.12, -0.44, -0.14, 0.18, 0.07, -0.14 and 0.5 respectively. This indicates that there exists positive relationship between prosocial behaviour and home environment dimensions like control, deprivation of privileges, nurturance and permissiveness of the senior secondary school students. It is also observed that there exists negative relationship between prosocial behaviour and home environment dimensions like protectiveness, punishment, conformity, social isolation, reward and rejection of the senior secondary school students. Thus it can be stated that the prosocial behaviour of the senior secondary school students is not positively influenced by the home environment in dimensions namely, protectiveness, punishment, conformity, social isolation, and reward and rejection. However, it is positively influenced by home environment dimensions namely control, deprivation of privileges, permissiveness and nurturance. On the basis of the above findings, the hypothesis no. 5 "There exists

positive relationship between prosocial behaviour and home environment of the senior secondary students" is thus, rejected.

CONCLUSION

The study enlists the following conclusions:

- The private senior secondary school boys and girls
 possess moderate level of prosocial behaviour. The
 private senior secondary school students are superior
 to the government senior secondary school students
 in prosocial behaviour.
- The private senior secondary school boys experience more control at home in comparison to private senior secondary school girls and government senior secondary school girls experience more control at home as compared to the government senior secondary school boys.
- The private senior secondary school girls experience more protectiveness at home in comparison to private senior secondary school boys and government senior secondary school girls experience more protectiveness at home in comparison to boys.
- The private senior secondary school boys experience more punishment at home in comparison to girls while the government senior secondary school boys experience more punishment at home in comparison girls.
- 5. The private senior secondary school girls experience more conformity at home environment in comparison to the boys and government senior secondary school boys experience more conformity in their home environment in comparison to the girls.
- 6. The private senior secondary school boys experience more social isolation in their home environment in comparison to the girls and the government senior secondary school boys experience more social isolation at home environment in comparison to the girls.
- 7. The private senior secondary school girls get more reward at home in comparison to the boys and government senior secondary school boys get more reward in their home girls.
- 8. The private senior secondary school boys feel more rejected in their home environment in comparison to

- the girls while and the government senior secondary school girls experience more rejection in their home environment in comparison to school boys.
- There is no significant difference between senior secondary boys and girls in their prosocial behaviour.
- There is significant difference between senior secondary boys and girls in their home environment.
- There is significant difference between government and private senior secondary school students in their prosocial behaviour.
- There is significant difference between government and private senior secondary school students in their home environment.
- 13. Prosocial behaviour and home environment of the senior secondary school students is positively co- related in control, deprivation of privileges and nurturance dimensions of home environment and negatively correlated with protectiveness, punishment, conformity, social isolation, reward and rejection dimensions of home environment.

References

Armenta, B.E., Carlo, G., Mestre, M.V., Samper, P., and Tur, A., 2011.

The Longitudinal relations among Dimensions of Parenting Styles,
Sympathy, Pro-social Moral Reasoning, and Pro-social Behaviors.

International Journal of Behavioral Development 35(2): 116-124.

- Batson, C.D. 1998. Altruism and prosocial behaviour Handbook of psychology–Wiley Online Library. Retrieved on November 8, 2013 from scholar.google.com.
- Culotta, C.M., and Goldstein, S.E. 2008. Adolescents' Aggressive and Pro-social Behavior: Associations with Jealousy and Social Anxiety. *Journal of Genetic Psychology* **169**(1): 21-33.
- Heath, S. B. 2001. Protean shapes in literacy events: Ever-shifting oral and literate Inst, *Edu. Res.* 8(3):11-15.
- Jagannathan. K. 1986. Family on Students Academic Achievements and Home schooling. Retrieved on Oct 28, 2013 from http: // www. Ukessays .com /essays /education /family-on-students-academic-achievements- and-homeschooling-education-essay.php.
- Maccoby 1993. Socialization in the context of the family: parent's child interaction. E.M. Hetherington, *handbook of child psychology*. New York John vilay and Sons. **4**: 1-101.
- Malti, T., Gummerum, M., Keller, M., and Buchmann, M. 2009. Children's moral motivation, sympathy, and prosocial behaviour. Retrieved on Nov 26, 2013 from http://www.ncbi.nlm.nih.gov/pubmed/19467003.
- Shelley M. 2004. Understanding home: a critical review of the literature. Retrieved on Jan 4, 2014 from http://onlinelibrary.wiley.com/doi/10.1111/j.1467-954X. 2004. 00442.x/full.
- Unisa, S. 1995. Demographic profile of the girl child in India. Journal of Social Change, 25: 30-37. Update (Fourth ed.). Upper Saddle River, N.J.: Pearson Education.
- Wilkinson, J. Carlo, G., McGinley, M., Hayes, R., and Batenhorst, C. 2007.
 Parenting Styles or Practices? Parenting, Sympathy, and Pro-social Behaviors among Adolescents. *Journal of Genetic Psychology* 168(2): 147-176.
- Zimmerman, B.J., and Gary D.L. 2000. "Social Cognitive Predictors of Pro-social Behaviour toward Same and Alternate Race Children among White Pre-schoolers.". New-York:Wiley.