

Humane Education: Building Pre-Adolescent's Empathy and Compassion Towards Animals in The Indian Context

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ABSTRACT

Considering the increasing conflict between human and non-human animals, some organizations in India have started emphasizing the need for inclusion of education in the school curriculum which teaches kindness and cultivates empathy and compassion towards all living creatures among children leading to the emergence of the field of humane education. Indian philosopher J. Krishnamurti lays utmost emphasis on children's exposure to nature and creating new values. Yet, there has been little rigorous research evaluating the efficacy and effectiveness of such programs in the Indian context. Increasing instances of animal cruelty are evident enough to see how the education system is failing to nurture children as sensitive beings who must learn to live in coexistence with nature. The current study discusses some of these issues and presents the findings from a quantitative study using ex post facto research design. A total of 100 students from 912th grade (all approximately 15-18 years old) from two separate schools were recruited as samples for the study. Two tools, namely, the Index of Empathy for Children and Adolescents (IECA) and the Children's Treatment of Animals Questionnaire (CTAQ) were used to measure the level of empathy and compassion respectively. The results showed that scores of both empathy and compassion increased for the students who were already being exposed to a human education programme (HEP). Still, only scores for compassion were found to be significantly different which meant that there was a positive impact on the compassion of students who were exposed to humane education than those who were not. The findings of this study have important implications for policymakers, educationists, school psychologists, and the like, to design effective HEPs and incorporate them into the school curriculum.

Keywords: *Empathy, Compassion, Indian Education, School Curriculum Indian Education*

Animals are an integral part of the planet and our life. They are not only restricted to their role in the ecological system but they are also our companions ("Companion Animals", n.d.). India is known for the social and cultural linkage with nature that has been a significant part of a child's development. Due to an absence of daily interaction with nature, especially in the cities, most children are growing up with a total lack of understanding of the natural world, which hampers holistic development (Tehsin, 2019).

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Received: August 11, 2024; Revision Received: September 27, 2024; Accepted: September 30, 2024

Instances of Animal Cruelty by Adolescents

There are numerous videos on social media (Instagram, Facebook, and TikTok) platforms, which contain acts of children engaging in animal abuse/cruelty. To mention a few- In 2015 in Delhi, an 18-year-old was accused of committing bestiality on a baby cow, and a medical college student from Vellore brutally killed a female monkey. Another case was reported where a mother and baby monkey were abused by a madaari (juggler) and local kids. In yet another instance from Ujjain, in 2020, a video on Tiktok surfaced where a dog was tied with rope and was flung into a lake by two teenage boys, thereby drowning it. In the same year another case was highlighted from Kolkata, West Bengal, where a young girl kicked a dog into a pond (In their rights, n.d.). Such acts are often committed without a sense of guilt and realizing the environmental impacts and the inhumane side of it. According to the report by the Federation of Indian Animal Protection Organisations (FIAPO) and All Creatures Great and Small (ACGS) over one decade the complaints received in regard to animal cruelty found to be increasing (In their own rights, n.d.). The maximum found to be in 2020-21 (Crime against Animals, 2021).

Animal Abuse and Violence Against People

Gleyzer et al. (2002) found a strong correlation between deliberate cruelty and antisocial behavior which hypothesize that animal cruelty is more common in children with antisocial personality traits. Animal abuse is strong predictor of future behavior, domestic violence and neglect (Hodges, 2008). Studies also showcase that violence towards animals is a strong predictor that the abuser may inflict violence on people in future (Boskovic et al., 2018; Hodges, 2008; Petersen & Farrington, 2007).

Approaches to Animal Cruelty

Instances of cruelty against animals highlight the need for an intervention that develops empathy and compassion towards animals and reduces aggressive tendencies among adolescents.

Preventive Approach

According to Indian law, The Prevention of Cruelty to Animals Act, 1960 prohibits any person from inflicting, causing, or if it is the owner, permitting, unnecessary pain or suffering to be inflicted on any animal (The Prevention of Cruelty to Animals Act, 1960, 2018).

Curative Approach

Values such as empathy and compassion need to be inculcated in the students at primary and secondary school levels - since that's where the process of sensitization begins. Theoretical and practical education must be included in schools to cultivate compassion toward animals (In Their Rights,n.d.). Increasing human-animal interaction and including humane education in the curriculum can be used as an intervention.

Humane Education

Humane education is referred as the teaching of compassion and respect in relation to animal welfare, environmental, and social justice issues. It strives to make the acquisition of required knowledge, skills, and a commitment to live ethically, sustainably, and. It does not only cultivate the desire and ability to live with compassion, integrity, and wisdom but also equips us with the knowledge and tools to put our beliefs into action in meaningful, far-reaching ways, allowing us to create solutions that benefit everyone peacefully (what is

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humane education? n.d.). Horsthemke (2009) points out that humane education incorporates guidance in moral reasoning and critical thinking and engages both rationality and individual responsibility. It is a reliable method and has potential long-term benefits for both humans and non-humans.

Empathy Development During Adolescents

Gender Intensification Hypothesis states that as children approach adolescence, a greater amount of social pressure to conform to societal norms is placed upon them which causes the behaviors and psychological functioning of girls and boys to become increasingly differentiated early adolescence is a time in which girls' and boys' gender role ascriptions become more differentiated based on societal stereotypes. The author states that by the early adolescent period, those who ascribe to greater levels of masculinity would display lower levels of empathy, while those who ascribe to greater levels of femininity would display higher levels of empathy (Andrews et al., 2021).

Significance Of Empathy Development During Adolescents

Komorosky et al., (2015) argue that though empathy is mostly viewed within childhood but its significance and further development in adolescence should not be ignored as at this stage, cognitive and neurological progression continues. Moreover, the environmental systems greatly expand. For those whose empathy development was fostered as a child, the pathway through adolescence is likely to be aided by this skill. But for those with whom empathy development is stunted, it may prove to make relationships and coping abilities more challenging.

Research Gap

There has been number of researches available on the significance and development of altruism and prosocial behavior but when it comes to humane education, there has not been enough research evaluating the efficacy and effectiveness of humane education programs in the Indian context. The present study addresses the gap in the existing literature by investigating the significant difference in the level of empathy and compassion among adolescents exposed to humane education. Furthermore, the studies conducted worldwide emphasize more early childhood stage for the development of empathy and compassion. The present study explores the dimensions of empathy and compassion during adolescence.

Significance of Study

This research study aims to offer important implications for policymakers to enable significant progress to be made in the curriculum, for educationists this research has the potential to be used as a basis for developing further research studies in the Indian context. School psychologists can use it to design effective behavioral management plans for students with aggressive and hostile behavior. The study is useful for all the stakeholders to design effective HEPs and incorporate them into the school curriculum.

Review of Literature

Arbour et al. (2009) presented a pilot study of humane education program (HEP) intervention. The author used an experimental research design and approached two schools, one as an experimental group that participated in HEP and the other school as comparison group. The study used the Children's Treatment of Animals Questionnaire (CTAQ) and Bryant's Empathy Index (BIE). Comparisons with an age-matched control group indicated

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that the four-week HEP increased measures of empathy and treatment of animals, although only the increase in empathy levels was significant.

Impact On Empathy and Violent Behavior

Research study shows the significance of companion animal interaction as the study conducted by Sprinkle (2008) used student self-report, disciplinary data, and teacher observational data to measure violent and aggressive behaviors, beliefs about aggression, and levels of empathy of individuals under the age of 18. It examined the use of rescued shelter dogs in a school-based violence prevention/ intervention and character education program. The outcome indicated that the healing species positively affects participants' normative beliefs about aggression and violent behaviors as measured by out-of-school suspensions, levels of empathy, and teachers' perceptions of outwardly aggressive behaviors.

Tissen et.al. (2007) explored the effects of different training methods on social behavior, empathy, and aggression (open and relational) in children (third graders) at several intervals. Different experimental conditions were carried out in three elementary schools— three classes per school (total of 230 children)—over a period of 10 weeks. There were ten training sessions (90 minutes each): one session per week. Data were analyzed using analysis of covariance revealed a significant improvement in empathy. However, the effect was not stable over time. A significant advantage with respect to open and relational aggression was demonstrated by the “Social Training with dogs” program.

Thompson (2003) proposed that one method for contributing to the building of empathy is to encourage direct contact with animals. As part of a violence prevention program, humane education can foster empathy and reduce the likelihood of aggression toward animals and people. Implementation of humane education programs not only prevents violence but also increases the likelihood of detecting and intervening early in violence that is already occurring in children's home environments.

Impact On Empathy and Prosocial Behavior

Komorosky and O'Neal (2015) in their study discuss the development of empathy and prosocial behavior by working with animals through the modalities of humane education, restorative justice, and animal-assisted programs. Where each modality focuses on building compassion, caring, responsibility, and kindness with the help of animals. Through these violence prevention programs, children and adolescents can develop empathy, which will decrease the likelihood of future aggression.

Samuels et al. (2016) Investigated the effects of a humane education program on students' attitudes and behaviors. Students were randomly assigned to participate in either a school-based humane education program or a chess club (the control group); all students participated in their respective activities during the same period once a week for 11 weeks. Data were collected one week before and after these programs were conducted. Students self-reported their attitudes about the treatment of animals and the environment via the Intermediate Attitude Scale. Teachers rated each student's prosocial and disruptive behaviors through sub-scales of the Teacher Observation of Classroom Adaptation– Checklist. Nested multilevel models of change found that the development of prosocial behaviors and self-reported attitudes significantly interacted with group assignment:

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Students who participated in the humane education program showed stronger growth in both of these outcomes compared with students in the control group.

Humane Education Through Use of Animals/Pets in Classroom

Dally et.al. (2010) assessed teacher's experiences with humane education and animals in the elementary classroom and suggested the implications for empathy development. The results were analyzed using a combined method of research and the outcome claimed that the use of live pets in the classroom contributed positively to increased empathy, as well as socio-emotional development. The authors recommend that programs and specific curricula should be developed that involve animals intending to promote moral awareness and foster humane treatment of both human and non-human animals.

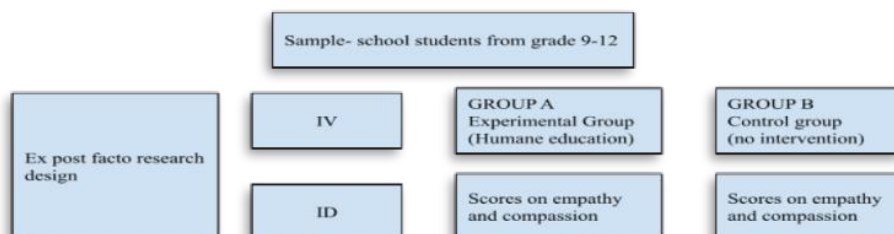
Animals can be used for many different reasons in the classroom. In a descriptive study on examining the presence of pets in the classroom the author explains that animals are "natural motivators" for learning. Spontaneous interactions between child and animal, or naturally occurring animal behaviors, provide potent "teachable moments" that encourage learning. However, more work is needed to examine the frequent and significant role of classroom animals in child development, education, and the human-animal bond (Rud & Beck, 2015).

METHODOLOGY

Research Design

The study uses the Ex-post facto research design. It is an approach in which groups with qualities that already exist are compared on a dependent variable. In this research design students from two different schools were taken as a sample. Students of School A are exposed to the concepts of humane education by engaging in activities other than the celebration of environmental days like plantation drives, saryu river cleaning drives, animal welfare projects, etc. The other group School B is a comparison group. The students of this are not exposed to humane education. Two psychometric tests were administered to obtain the scores on empathy and compassion. Hence, there was no manipulation done and results were naturally compared and analyzed based on obtained scores on empathy and compassion from both the groups.

Figure 1 Research Design



Research Question

Is there a significant difference in the empathy and compassion among students exposed to humane education?

Hypotheses

Null Hypothesis.

1. There will be no significant difference in empathy of students who are exposed to humane education than those who are not.

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2. There will be no significant difference in compassion of students who are exposed to humane education than those who are not.

Alternative Hypothesis.

1. There will be a positive impact on the empathy of students who are exposed to humane education than those who are not.
2. There will be a positive impact on the compassion of students who are exposed to humane education than those who are not.

Variables.

Independent Variable.

Exposure to humane education

Dependent variable.

Impact on student's empathy and compassion

Participants

The participants of the study were 9-12th grade students (all approximately 14-18 years old) from two separate schools. The experimental (E) group includes students who have been exposed to the pedagogy of humane education, whereas the control (C) group includes the group of students who are not exposed to humane education.

Sample

- Age group - 14-18 years old
- 9th to 12th Grade
- Inclusive of all gender and ethnic groups.
- Sampling Technique- a combination of convenience and Purposive sampling

Tools

Index of Empathy for Children and Adolescents (IECA).

The purpose of the scale is to measure empathy in children and adolescents to foster an understanding of how empathy develops and how it relates to social development. There are two samples of this measure. The first sample included first, fourth, and seventh graders (N=258) from parochial schools in a western state. The second sample included first and seventh graders from a large public middle school (N=166).

Reliability evidence.

Internal consistency ranges from 0.54 to 0.79. Test-retest reliabilities range from 0.74 to 0.85 (Bryant, 1982).

Validity evidence.

Items were adapted from a previously constructed measure used with adults developed by Mehrabian and Epstein (1972) (Bryant, 1982). The empathy index related to measures of aggressiveness in first- and fourth-grade boys and measures of acceptance of individual differences for all age groups. The empathy index also correlated with adult empathy measures (Bryant, 1982).

Children's Treatment of Animals Questionnaire (CTAQ, Thompson and Gullone 2003).

The scale has a 13-items, self-report measure of children's humane behavior toward non-human animals. Respondents indicate whether they engage in a particular activity with their companion animal (or imaginary companion animal if the child does not have one). For example, participants are asked if they "Play with," "Yell at," or "Cuddle" their companion animal, with the response format being: "Often" (score = 3), "Sometimes" (score = 2), or "Never" (score = 1). Higher scores (following reverse coding where necessary) reflect more humane treatment toward animals. The psychometric properties of CTAQ are considered acceptable, with good internal consistency (i.e., Cronbach's alpha yielded coefficients of 0.81) and good test-retest reliability (i.e., a coefficient of 0.64).

Data Collection Method

Data was collected from two schools in Ayodhya to compare the results of School A and School-B respectively. Consent was obtained from the school Principal and later from the participants as well as from the parents using Google form. The mode of data collection was online. After obtaining the consent from all the participants which took eight days. An online meeting was scheduled later and the participants were instructed about attempting the test. There was a total of seven meetings organized in order to finish the administration and data collection.

Procedure

Primarily the two schools were approached, one which uses and engages its students in activities using the concept of humane education by engaging in activities other than the celebration environmental days like plantation drive, Saryu River cleaning drive, animal welfare projects, etc. (Experimental Group) and other which does not (Control Group). Consent from both the school principals was taken. Later in order to maintain unbiased responses from the participants they were not made aware of the specific aims of the project, instead, they were told on a general level that the study would investigate attitudes toward both animals and people in different situations (only the required information of the research were shared in advance with the participants). Once all the consent forms were collected from students as well as from their guardians, both the tests CTAQ and the BIE were administered to both the E and C groups. The participants were assisted only if they found any difficulty with the items to understand. Later on, on the basis of quantitative results, the data were interpreted.

Results

The data collected from the experiment were statistically analyzed using the software Jamovi. The data was cross-checked for errors, and negatively worded items were reversely coded prior to any analyses. To check if the CTAQ and BIE scores were significantly different between the E and C groups, an independent samples t-test was used. The obtained scores and analysis of BIE show the p-value (0.303) which is greater than the alpha value (0.05) hence proved to be insignificant. Therefore, the first null hypothesis is accepted. On the other hand, the scores obtained from CTAQ when analyzed found a p-value (0.001) which is less than the alpha value ($P > 0.05$). Hence proved to be significant and therefore the second alternative hypothesis is accepted. It can be concluded from the data that though scores of both empathy (BIE) and treatment of animals (CTAQ) increased for the students who are already being exposed to HEP but only scores for compassion were found to be significantly different which means that there is a significant positive impact on the level of compassion among students who are exposed to humane education than those who are not.

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Table 1 Comparison of scores of Index of Empathy for Children and Adolescents (IECA). Independent sample T-test

		statistics	df	p	mean difference	SE difference		Effect size
Empathy	Student's t	1.04	135	0.302	0.512	0.494	Cohen's d	0.179

Table 2 Group Descriptives

Empathy	Group	N	Mean	Median	SD	SE
	School A	60	13.0	13.0	2.82	0.364
	School B	77	12.5	12.0	2.91	0.332

Figure 2 Plots of Empathy

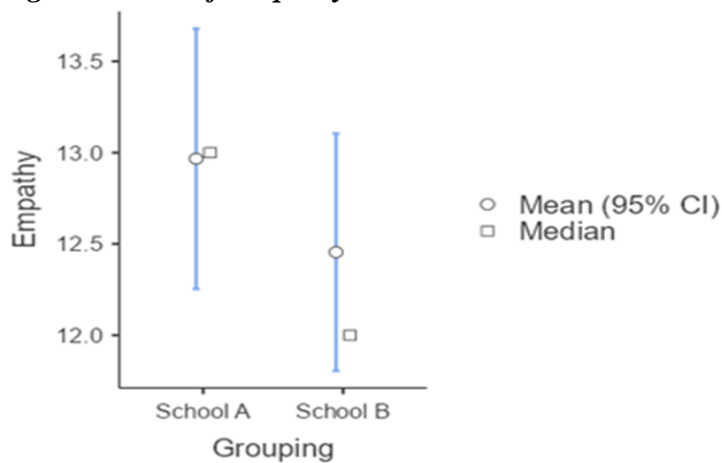


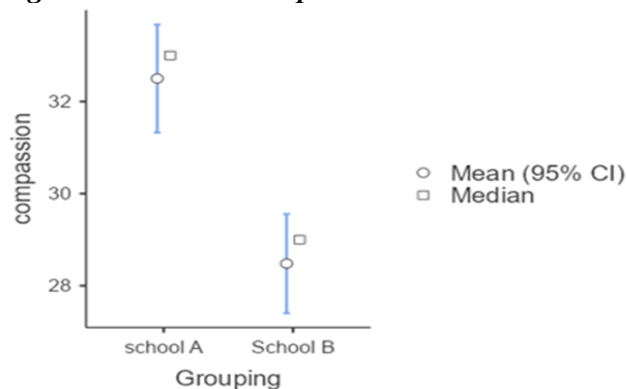
Table 3 Comparison of scores obtained on CTAQ using Independent Samples T-Test

		statistics	df	p	mean difference	SE difference		Effect size
Compassion	Student's t	4.86	35	01	4.02	0.827	Cohen's d	0.845

Table 4 Group Descriptives

Compassion	Group	N	Mean	Median	SD	SE
	School A	56	32.5	33.0	4.48	0.598
	School B	81	28.5	29.0	4.94	0.549

Figure 3 Plots on Compassion



DISCUSSION

The purpose of the current study was to evaluate if exposure to humane education develops empathy and compassion among adolescents for which students from 9-12 grade students were chosen to be the participant of the study. The word empathy and compassion are often used interchangeably but they do differ in their meaning. Empathy is the ability to understand, imagine and feel others' emotions whereas compassion is more action oriented. When an individual is compassionate, he/she understands other's suffering and emotions and is more likely to take action to help to ensure the positive outcome. In this study two schools were selected for comparison one which incorporates the concepts of humane education and the other does not. In order to maintain the confidentiality, they were named to SCHOOL A and SCHOOL B. The results showed that, both empathy (BIE) and treatment of animals scores (CTAQ) increased for the students who are already being exposed to HEP but only scores for compassion were found to be significantly different which means that there is a positive impact on compassion of students who are exposed to humane education than those who are not. Therefore, the idea of compassionate classrooms would be successful in sowing seeds of compassion through HEPs. Research says that the children who are engaged in animal cruelty have 70% of changes of showing criminal tendencies when they grow up and might be threat to human beings as well and humane education has found be effective in implementing various school programs to reduce violence and enhance kindness among students as its major goal is to teach respect, kindness, and compassion by using animal-related lessons and activities. Therefore, it is important to incorporate humane education in school curriculum as it gives an opportunity to prevent, detect and interrupt violence. In terms of key components, three strategies employed in school-based humane education programmes can be identified: Lessons that integrate the curriculum, literature with humanitarian themes, and activity to aid learning (Faver, 2010). HEP should be used in school settings to nurture kindness among students naturally which significantly impacts their pro social behaviour positively in their developmental age (Samuels, 2018). Hence the goals of schools to develop compassionate citizens and leaders can be fulfilled through this program. A wider range of positive social and educational outcomes can be achieved and extended to areas such as: bullying, teenage pregnancies, drug-taking, racism, and the persecution of minority groups. It has also been shown to increase school attendance rates, enhance school relationships and behavior, and to improve academic achievement. (Education, 2021).

Implications

- The study aims to offer important implications for policymakers to enable significant progress to be made in the curriculum.
- For educationists, this research has the potential to be used as a basis for developing further research studies in the Indian context.
- School psychologists can use it to design an effective behavioral management plan for students with aggressive and hostile behavior.
- The study is useful for all the stakeholders to design effective HEPs and incorporate them into the school curriculum.

Limitations

- In ex post facto research design hypotheses are not tested as research conducted without manipulation. Hence, the ex post facto research design does not give the

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researcher the basis to define a clear relationship between the independent and dependent variables

- The noted relationship may actually exist but it is not necessarily the only relationship
- The study provides limited outcome because of the quantitative nature of research method.

REFERENCES

- Andrews, K., Lariccia, L. Talwar, V., Bosacki, S. (2021). empathetic concern in emerging adolescents: the role of theory of mind and gender roles. *The Journal of Early Adolescence*, 41(9), 1394-1424. <https://doi.org/10.1177/02724316211002258>
- Boskovic, M., Putnik, N., Jankovic, B. (2018). Exploring the link between cruelty to animals and violence against people: violence against people and animals – evidence. IGI Global. <https://doi.org/10.4018/978-1-5225-3958-2.ch003>
- Bryant, B. (1982). An index of empathy for children and adolescents. *Child Development*, 53, 413- 425.
- Crime against animals. (2021). Animal Welfare Board of India. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1741896>
- Daly, B., & Suggs, S. (2010). Teachers' experiences with humane education and animals in the elementary classroom: implications for empathy development. *Journal of Moral Education*, 39(1), 101–112. <https://doi.org/10.1080/03057240903528733>
- Hodges, C. (2007). The link: cruelty to animals and violence towards people. Michigan State University College of Law. <https://www.animallaw.info/article/link-crueltyanimals-and-violence-towards-people>
- Horsthemke, K. (2009). Rethinking humane education. *Ethics and Education*, 4(2), 201–214. <https://doi.org/10.1080/17449640903326813>
- In their own right – calling for parity in law for animal victims of crimes. (n.d.). Federation of Indian Animal Protection Organisations. https://www.fiapo.org/fiaporg/wpcontent/uploads/crimesagainstanimals/Crimes_Against%20Animals_Report_latest.pdf
- Komorosky, Dawna; O'Neal, Keri K. (2015). The development of empathy and prosocial behavior through humane education, restorative justice, and animal-assisted programs. *Contemporary Justice Review*, 18(4), 395–406. <https://doi.org/10.1080/10282580.2015.1093684>
- Kotrschal, K., & Ortbauer, B. (2003). Behavioral effects of the presence of a dog in a classroom. *Anthrozoös*, 16(2), 147–159. <https://doi.org/10.2752/089279303786992170>
- Petersen, M. L., Farrington, P. D. (2007). Cruelty to animals and violence to people. *Victims & Offenders*, 2(1), 21–43. <https://doi.org/10.1080/15564880600934187>
- Rud, A., & Beck, A. (2015). Companion animals in Indiana elementary schools. Retrieved 19 March 2022, from <http://dx.doi.org/10.2752/089279303786992134>.
- Samuels, E.W., Meers, L.L., Normando, S. (2016) Improving upper elementary students' humane attitudes and prosocial behaviors through an in-class humane education program. *Anthrozoös*, 29:4, 597-610. <https://doi.org/10.1080/08927936.2016.1228751>
- Sprinkle, J. E. (2008). Animals, empathy, and violence. *Youth Violence and Juvenile Justice*, 6(1), 47-58. <https://doi.org/10.1177/1541204007305525>
- The prevention of cruelty to animals act, 1960. (2018). Asia Law House.
- Thompson, K. L., & Gullone, E. (2003). The children's treatment of animals questionnaire (CTAQ): A psychometric investigation. *Society & Animals*, 11 (1), 1-15.

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- Thompson, K., & Gullone, E. (2003). Promotion of empathy and prosocial behaviour in children through humane education. *Australian Psychologist*, 38(3), 175-182. <https://doi.org/10.1080/00050060310001707187>
- Tissen, I., Hergovich, A., & Spiel, C. (2007). School-based social training with and without dogs: evaluation of their effectiveness. *Anthrozoös*, 20(4), 365-373. <https://doi.org/10.2752/089279307x245491>
- What is humane education? (n.d.). Stray Relief and Animal Welfare. <https://www.strawindia.org/what-is-humane-education.aspx>

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Lakhmani, M. & Arur, A. A. (2024). Humane Education: Building Pre-Adolescent's Empathy and Compassion Towards Animals in The Indian Context. *International Journal of Indian Psychology*, 12(3), 3082-3092. DIP:18.01.298.20241203, DOI:10.25215/1203.298