Comparison of Parents' Positions on the Impact of Technical and Social Perspectives on Moral Behavior of Adolescents

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Rachita Gupta1, Dr Priyanka Singh Niranjan2

1 Research Scholar, Amity University, Noida, Uttar Pradesh, rachita29288@gmail.com
2 Assistant Professor, Amity University, Noida, Uttar Pradesh, psniranjan@amity.edu

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Abstract

The Moral Behaviour of Adolescents is a matter of concern for the society. The significance of Moral Behaviour lies in it being internalized in the very innate nature. Adolescence being the foundational age for most habits to get formed in life, the development of Moral Behaviour at this age is important. In order to accomplish this task more effectively, the goal of this study is to evaluate parents' perceptions. (who are the most dominant example for each discrete teen) regarding the impact of a few common Social and Technical perspectives on the Moral Behaviour of Adolescents. Sample consisted of 200 randomly selected parents of 9th and 10th class students of CBSE affiliated schools of Delhi. Two questionnaires were designed to collect data which were analysed using descriptive statistics. Important comparisons between effectiveness of Social and Technical factors and stances of male and female parents have been laid using t- test. The results reflect a beneficial effect of Social perspectives and a non-beneficial effect of Technical differences on Moral Behaviour. A substantial difference was found between the mean scores for 'Effect of Social Perspectives' and 'Effect of Technical Perspectives' while no substantial difference was found in responses of male and female parents. Further, a few research ideas are suggested for researchers who are interested in exploring the topic further.

1. Introduction

The personality of a person is reflected in his actions and responses. One's decision making and retaliations in the situations involving moral challenges and dilemmas is what forms the framework of his morality and in turn embodies his overall personality. The significance of Moral Behaviour lies in it being internalized in the very innate nature of an individual. The morality in an individual has been found to get affected by many factors which can be categorized broadly into Internal and Environmental. The moral development is a sequential phenomenon involving various steps and hidden internal mental processes. An individual learns to make moral judgements by applying moral reasoning and this involves building up of moral concept. The conversion of judgement into moral actions require moral motivation and moral courage. In some cases, morality has also been seen to get affected by gender. The environmental factors primarily involve social features like culture, religion and norms of society. Further, parents and parenting

styles, peers, education and socio- economic status have strong influence on moral actions. Recently, in last two decades, it has been observed that technological factors like media, internet and availability of gadgets influence moral actions in a huge way.

The Moral Behaviour of Adolescents has always been a matter of concern for the society and therefore, for researchers. Adolescence being the foundational age for most habits to get formed in life, the development of Moral Behaviour at this age is important. The gestures of children depict their internalized moral inclinations which are impacted by huge number of factors around them (Grusec et al., 2015; Killen & Smetana, 2015; Panahi, 2015). Moral behaviour is believed to be an outcome of interactions between various functions and processes (Termini & Golden, 2014; Turiel et al., 1987) which have been discussed above. The children from tumultuous families are mostly observed to develop delinquent behaviour (Bateva, 2014). Parental care plays a major role in

development of children's overall personality and attitude which involve their language, academics and morality. A child with low satisfaction from family acquaints a feeling of loneliness which in turn makes him/her an unhappy child who is not able to make friends. Such a child is not able to effectively cope up with his aggressive behaviour (Shurbanovska, 2013). An exhaustive literature review manifests a constructive role of different parenting strategies, parents' psychology and parents' personality in shaping children's moral inclinations (Hazra & Mittal, 2018; Loudová & Lašek, 2015; Van der Spoel, 2005).

Further, arriving at the discussion about Technical factors, information and communication technology has become an inseparable part of life. The use of latest technology is also apparent in education system. It is easily accepted as it is interesting, easy and quick but at the same time it is resisted due to underdeveloped competencies, limited access and lack of trust in new technologies (Novković Cvetković et al., 2022). According to Danaher & Sætra (2022) the invention of modern technology (ICT, AI, Robotics etc) is expected to have a profound impact on moral system of individuals. The research review raises important issues with respect to morality in information age. We need to contemplate if we have capacity to expand our sense of moral reasoning, moral motivation and moral control capabilities so as to incorporate the changing behaviour patterns due to online exposure (Willard, 1998). Media affects the aggressive nature differently in boys and girls (How & May, 2006). A study by Njoroge in 2013 shows that youth favours social media for many reasons, most common being opportunity to be in close touch with multiple old and new friends, easy and quick delivery of messages, immediate feedback and absence of parental control. But at the same time, most of the respondents believe that social media makes the users lazy and a habit of wasting time is developed among frequent users.

It is important for readers to acknowledge the due difference between ideal morality and social morality. The authors in this paper are focused upon the study of Moral Behaviour which has its roots into social morality laying importance to what is considered to be right or good in actual practice unlike ideal morality which is more interested in epistemology of moral norms (Danaher & Sætra, 2022). Every new technological invention in the society beholds the responsibility for social change which affects all kinds

of behaviour including morality of individuals occupied within the horizons of such a change. The researchers (Danaher & Sætra, 2022) propose three criteria to effectively distinguish if a change in behaviour can be categorized into a permanent change in socially recognized moral behaviour pattern. These include: a) it reflects a structured pattern of behavioural and cognitive change, b) it is practiced by a large community and c) it can be explained and evaluated in terms of moral emotions. A moral change can be both beneficial or non-beneficial rather harmful for the future generation. A particular moral trait which is desirable for us today, if changes, can be regretted in long term. This is the reason that it is highly significant to trace the moral change accompanied with every new social or technological switch. A lot of researches have been conducted across the nations and cultures in this context but there is still not enough work in context to Indian society and most of it is theoretical. Hence, researchers have attempted to fill this gap with this study.

2. Materials and Methods

This research is an ex- post facto research and incorporates survey method. The data has been collected through opinionnaires specially designed for the study and then analysed quantitatively.

The study has been conducted with following objectives:

- To find parents' views on 'Effect of Social Perspectives on Adolescent Moral Behaviour'.
- To find parents' views on 'Effect of Technical Perspectives on Adolescent Moral Behaviour'.
- To analyse the responses of mothers and fathers separately with respect to 'Effect of Social and Technical Perspectives on Moral Behaviour'.
- To compare the responses of mothers and fathers for 'Effect of Social Perspectives on Moral Behaviour of Adolescents'.
- To compare the responses of mothers and fathers for 'Effect of Technical Perspectives on Moral Behaviour of Adolescents'.
- 6) To compare the responses of both the parents about 'Effect of Social Perspectives and that of Technical Perspectives on Moral Behaviour of Adolescents'.

Two questionnaires were developed specifically for the study. The first questionnaire was designed to study parents' viewpoints on 'Effect of Social Perspectives on Moral Behaviour of Adolescents'. The Social Perspectives majorly studied are 1) Parents' Profile (Qualifications and Job profile of both parents), 2) Involvement with Parents (Quality time spent by parents with their children) and 3) Family Structure (Number of siblings and type of family). The second questionnaire was designed to study parents' viewpoints on 'Effect of Technical Perspectives on Moral Behaviour of Adolescents'. The Technical factors majorly studied are 1) Exposure to Electronic Media, 2) Internet availability and 3) Verbal and Text Chatting.

The questionnaires were distributed to randomly sampled 200 parents of CBSE affiliated school students of Delhi. The sample consisted of 125 male parents i.e. fathers and 75 female parents i.e. mothers. Only one parent of one child was allowed to answer the questions. All the questionnaires were three-point

scales wherein statements exhibiting effect of Independent variable (Social/Technical) on Dependent Variable (Moral Behaviour) were given and parents were required to mark one of the following three options- a) Affects negatively b) Does not affect c) Affects positively.

The data was analysed using descriptive statistics and t-test which were performed using Microsoft Excel.

3. Results

The Sum total of scores, Mean, Range, Standard Deviation and Variance were calculated for the two questionnaires.

Objectives 1 & 2:

- To find parents' views on 'Effect of Social Perspectives on Adolescent Moral Behaviour'.
- 2) To find parents' views on 'Effect of Technical Perspectives on Adolescent Moral Behaviour'

Social Per	spectives	Technical Pe	rspectives
Mean	10.85	Mean	-0.43
Standard Deviation	3.57	Standard Deviation	8.98
Sample		Sample	
Variance .	12.74	Variance	80.65
Range	16.00	Range	36.00
Minimum	4.00	Minimum	-20.00
Maximum	20.00	Maximum	16.00
Sum	2170.00	Sum	-85.00
Count	200.00	Count	200.00

Table 1: Descriptive Statistics for 'Effect of Social Perspectives on Moral Behaviour' and 'Effect of Technical Perspectives on Moral Behaviour'

The mean of two groups vary hugely. The mean of scores marked on 'Effect of Social Perspectives on Moral Behaviour of Adolescents' is found to be 10.85 which shows a positive effect of social perspectives on Moral Behaviour but the value being not very high represents that there are certain social parameters which have either neutral or negative effect on moral behaviour to bring down the overall mean. The standard deviation is 3.57 and variance is 12.74 which exhibits less variation in responses of the respondents.

The scores range from 4 to 20 which equals 16 and thereby reveals that total scores of parents are not widespread.

The mean of scores of 'Effect of Technical Perspectives on Moral Behaviour of Adolescents' is -0.425. A negative mean manifests overall slight negative effect of technical perspectives on Moral Behaviour of adolescents. The standard deviation is 8.98 and variance is 80.65. The scores range is 36 as maximum and minimum scores are 16 and -20

respectively. The overall values depict huge variation among responses of parents. A few items on scale have

been marked very differently by sample due to which data is widely spread leading to high variance.

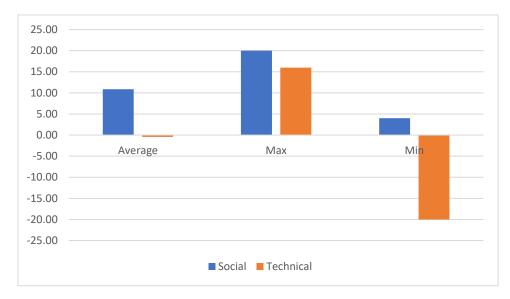


Figure 1: Comparison of Descriptive Statistics for 'Effect of Social Perspectives on Moral Behaviour' and 'Effect of Technical Perspectives on Moral Behaviour'

The comparison of important descriptive statistics values can be seen in Figure 1. The scores for Social Perspectives reach the highest while that for Technical Perspectives lowest.

Objective 3: To analyse the responses of mothers and fathers separately with respect to 'Effect of Social and Technical Perspectives on Moral Behaviour'.

Social		Technical	
Mean	11.08	Mean	0.32
Standard	3.64	Standard	9.03
Deviation		Deviation	
Sample	13.22	Sample	81.51
Variance		Variance	
Range	15.00	Range	31.00
Minimum	5.00	Minimum	-15.00
Maximum	20.00	Maximum	16.00
Sum	1385.00	Sum	40.00
Count	125.00	Count	125.00

Table 2: Descriptive Statistics for Male responses on 'Effect of Social Perspectives on Moral Behaviour' and 'Effect of Technical Perspectives on Moral Behaviour'

The third objective is to analyse the responses of mothers and fathers separately which has been done using descriptive statistics. There are 125 males and 75 females amongst respondents. The difference between averages of male and female responses for 'Effect of Social Perspectives on Moral Behaviour' is only 0.61 which means that views of mothers and fathers differ

negligibly when it comes to role of social factors in affecting Moral Behaviour of adolescents.

The difference of male and female averages for 'Effect of Technical Perspectives on Moral Behaviour' is 1.99 which reflects that the difference of views is low about the role of technical factors in developing Moral Behaviour among adolescents.

Social		Technical	
Mean	10.47	Mean	-1.67
Standard		Standard	
Deviation	3.45	Deviation	8.82
Sample		Sample	
Variance	11.87	Variance	77.79
Range	11.00	Range	32.00
Minimum	4.00	Minimum	-20.00
Maximum	15.00	Maximum	12.00
Sum	785.00	Sum	-125.00
Count	75.00	Count	75.00

Table 3: Descriptive Statistics for Female responses on 'Effect of Social Perspectives on Moral Behaviour' and 'Effect of Technical Perspectives on Moral Behaviour'

The Figure 2 below picturises the comprehensive results. The pattern of parents' views is same for male and female guardians although the points on the graph corresponding to averages differ slightly.

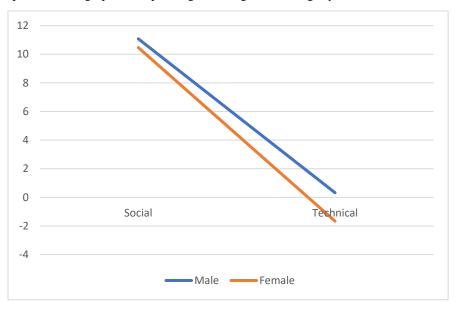


Figure 2: Comparison of Means of Scores of 'Effect of Social Perspectives on Moral Behaviour' and 'Effect of Technical Perspectives on Moral Behaviour' by Male and Female respondents

Objective 4: To compare the responses of mothers and fathers for 'Effect of Social Perspectives on Moral Behaviour of Adolescents'.

To compare the views of male and female parents in context to 'Effect of Social Perspectives on Moral Behaviour of Adolescents', two hypotheses were framed.

 H_{01} = There is no substantial disagreement among the scores of male parents and female parents in context to

'Effect of Social Perspectives on Moral Behaviour of Adolescents'.

 H_{al} = There is a substantial disagreement among the scores of male parents and female parents in context to 'Effect of Social Perspectives on Moral Behaviour of Adolescents'.

Since, there is no important difference in variances of two groups, a t- test with assumption of equal variances was performed to test the null hypothesis, H_{01} .

	Social (Male)	Social (Female)
Mean	11.08	10.47
Variance	13.22	11.87
Observations	125.00	75.00
Pooled Variance	12.72	
Hypothesized Mean		
Difference	0.00	
Df	198.00	
t Stat	1.18	
P(T<=t) one-tail	0.12	
t Critical one-tail	1.65	
P(T<=t) two-tail	0.24	
t Critical two-tail	1.97	

Table 4: t-test for comparison of means of male and female responses for 'Effect of Social Perspectives on Moral Behaviour'

The statistical value is less than the Critical value for two-tailed t test and also P value is greater than 0.05 which is the level of significance for this study. Therefore, the null hypothesis is accepted.

Objective 5: To compare the responses of mothers and fathers for 'Effect of Technical Perspectives on Moral Behaviour of Adolescents'.

To compare the views of both the parents in context to 'Effect of Technical Perspectives on Moral Behaviour of Adolescents', two hypotheses were framed.

 H_{02} = There is no substantial disagreement among the scores of male parents and female parents in context to 'Effect of Technical Perspectives on Moral Behaviour of Adolescents'.

 $H_{\rm a2}$ = There is a substantial disagreement among the scores of male parents and female parents in context to 'Effect of Technical Perspectives on Moral Behaviour of Adolescents'.

Since, there is no substantial disagreement in variances of two groups, a t- test for equal variances was performed to test the null hypothesis, H_{02} .

	Technical (Male)	Technical (Female)
Mean	0.32	-1.67
Variance	81.51	77.79
Observations	125.00	75.00
Pooled Variance	80.12	
Hypothesized Mean		
Difference	0.00	
Df	198.00	
t Stat	1.52	
P(T<=t) one-tail	0.07	
t Critical one-tail	1.65	
P(T<=t) two-tail	0.13	
t Critical two-tail	1.97	

Table 5: t-test for comparison of means of male and female responses for 'Effect of Technical Perspectives on Moral Behaviour'

The t Stat value is less than t Critical two- tail value and also P value for two- tail is greater than the level of

significance which is 0.05 for this study. Therefore, the null hypothesis is accepted.

Objective 6: To compare the responses of both the parents about 'Effect of Social Perspectives and that of Technical Perspectives on Moral Behaviour of Adolescents'.

The sixth objective that is to compare the means of two scales viz. 'Effect of Social Perspectives on Moral

Behaviour of Adolescents' and 'Effect of Technical Perspectives on Moral Behaviour of Adolescents' has been analysed using t- test for unequal variances as a notable difference in the variances of the two categories was found.

t-Test: Two-Sample Assuming Unequal Variances		
	Social	Technical
Mean	10.85	-0.43
Variance	12.74	80.65
Observations	200.00	200.00
Hypothesized Mean		
Difference	0.00	
Df	260.00	
t Stat	16.50	
P(T<=t) one-tail	0.00	
t Critical one-tail	1.65	
P(T<=t) two-tail	0.00	
t Critical two-tail	1.97	

Table 6: t-test for comparison of means of responses marked by parents for 'Effect of Social Perspectives on Moral Behaviour' and 'Effect of Technical Perspectives on Moral Behaviour'

The two hypotheses were framed and tested to get the clear picture of data set in hand.

H₀₃ = There is no substantial disagreement among the means of scores of 'Effect of Social Perspectives on Moral Behaviour of Adolescents' and 'Effect of Technical Perspectives on Moral Behaviour of Adolescents'.

H_{a3} = There is a substantial disagreement among the means of scores of 'Effect of Social Perspectives on Moral Behaviour of Adolescents' and 'Effect of Technical Perspectives on Moral Behaviour of Adolescents'.

The results show that the calculated value i.e. 16.50 is greater than the critical value for two tailed t test i.e. 1.97. Also, P- value is less than the level of significance value (0.00< 0.05). Therefore, H_{03} is rejected and alternative hypothesis H_{a3} is accepted.

4. Discussions

The overall results show opposite effect of Social and Technical Perspectives on Moral Behaviour of Adolescents. The high positive effect of social parameters in life of teenagers on their Moral Behaviour is in accordance with the studies already being conducted since decades. The socio- economic status of family, family processes like cohesion and communication among parents and children (White & Matawie, 2004), parenting style (Bi et al., 2018; Boyes & Allen, 1960; Panahi, 2015; Tan & Yasin, 2020) and peer group (Tomé, 2012) effectively leads to modification of behavioural patterns in adolescents.

In this study researchers have focused majorly three social factors which are parents' profile, involvement with parents and family structure. Both male and female parents have a view that parents with better qualifications and more established jobs effect Moral Behaviour of adolescents positively. Parents who spend quality time with their children, discuss family matters with them and involve them in decision making are able to better shape the Moral Behaviour of their teenagers. Also, the study reveals that most parents think that the presence of a sibling is better for the morality of teens. However, there are quite a mixed view about role of joint families in development of Moral Behaviour. The scores highlight that most parents do not find the role of joint families in children's behaviour patterns but still most parents

believe that children brought up in joint families have less faith in loyalty among relationships. The Moral Behaviour has wide dependency on environment. Parents play the most important role in creating a conducive environment around the child. Parents with better qualifications and less stressful jobs are believed to guide children better in the moral concept formation due to which they learn to reason their decisions strongly and morally. Parents who spend quality time with their children are the ones with democratic style of parenting and such parents allow their wards to practice moral actions through their motivation and by empowering moral courage in them. Siblings share a very intense and friendly bond and thus, having friends within family builds a positive guidance and ideal role models around children.

Technology interferes in the quality of parent-teen interaction which hinders the development of teenagers' Moral Behaviour in a major way (Nabawy et al., 2016). A similar study reported that more screen time of students lead to their low attachment with parents and peers (Richards et al., 2010) and increase in aggression (Anderson & Bushman, 2002; Schramm, 1997). Studies have shown that youth accept the fact that social media has a major role in introducing them to pornographic content and sexual attractions (Njoroge, 2013).

The present study reveals an overall negative effect of exposure to electronic media on Moral Behaviour. Parents mark that media like television might affect behaviour of children towards parents positively but it enhances aggression and impacts the honesty in work and relationships negatively. Thus, the negative effect of technical factors on morality is basically due to it acting as a distraction from positive influences. Moreover, the access to internet results into a negative effect on teenagers' behaviour as it intensifies the acts like bullying, viewing unethical content and use of abusive words. Further, verbal and text chatting decrease the concentration in work and sense of responsibility while increases the inclination towards having love relationships. The scores suggest that the parents who are aware of appropriate usage of technology and have the knowledge of ways to apply parental controls have totally different views on effect of technology than parents who themselves are less equipped with technology. Still the views of parents about negative effect of technology on adolescent morality cannot be denied.

5. Conclusion and Suggestions

The study reveals that social factors i.e. parents' profile, involvement with parents and family structure have positive effect on Moral Behaviour of adolescents. To elaborate, better qualifications of parents, fixed source of earning of parents, spending quality time with parents, involvement in family decisions, presence of sibling/s create positive effect on Moral Behaviour of adolescents. Living in a joint family may affect the morality of child in both ways i.e. positively and negatively. The Technological Perspectives i.e. exposure to electronic media, internet availability and verbal and text chatting have a negative effect on Moral Behaviour of adolescents. Electronic media like television and excessive internet usage increases indiscipline, reduces sense of responsibility, honesty and concentration in work. So, our study, in accordance with the already existing studies in different parts of the globe, supports the positive effect of social and negative effect of technical perspectives on Moral Behaviour of adolescents.

The topic of study is a necessity for present times and has a great scope for research to study. The researchers who wish to study Moral Behaviour should try to observe behaviour directly in different situations. Also, an attempt is required to gather data on relationship of different factors with Moral Behaviour. The viewpoints of other stakeholders like teachers, peers and adolescents themselves about Moral Behaviour can be studied. A tool can be developed to find exact Moral Behaviour as is done for other kinds of behavioural patterns.

So, there is a huge scope in the topic and in fact it's a need of time to study morality in youth to control the continuously growing problems of disharmony, violence and crime amongst teenagers across the globe.

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Conflict of interests

The authors declare that there is no conflict of interest in respect to funding, content, publication or any other relevant issue.

References

- [1] Hwang, S.; Kim, J. UN and SDGs: A Handbook for Youth. Available online: https://www.unescap.org/resources/un-and-sdgs-handbook-youth (accessed on 20 August 2021).
- [2] Rocha, E.M. A Ladder of Empowerment. J. Am. Plan. Assoc. 1997, 17, 31–44.
- [3] Wiley, A.; Rappaport, J. Empowerment, Wellness and the Politics of Development. In The Promotion of Wellness in Children and Adolescents; Cicchetti, D., Rappaport, J., Sandler, I., Weissberg, R.P., Eds.; Child Welfare League of America Press: Washington, DC, USA, 2000; pp. 59–99. ISBN 0878687912.
- [4] Rivera, A.C.; Seidman, E. Empowerment Theory and Youth. In Encyclopedia of Applied Developmental Science; Fisher, C.B., Lerner, R.M., Eds.; SAGE Publications, Inc.: Thousand Oaks, CA, USA, 2005; pp. 401–403. ISBN 0-7619-2820-0.
- [5] SDSN-Youth. Youth Solutions Report; SDSN-Youth: New York, NY, USA, 2020.
- [6] World Commission on Environment and Development. Report of the World Commission on Environment and Development: Our Common Future; World Commission on Environment and Development: New York, NY, USA, 1987.
- [7] Keitsch, M. Structuring Ethical Interpretations of the Sustainable Development Goals—Concepts, Implications and Progress. Sustainability 2018, 10, 829.
- [8] Torpman, O.; Röcklinsberg, H. Reinterpreting the SDGs: Taking Animals into Direct Consideration. Sustainability 2021, 13, 843.
- [9] Ife, J. Radically Transforming Human Rights for Social Work Practice. Available online: https://www.aasw.asn.au/document/item/9560 (accessed on 28 September 2021).
- [10] United Nations Department of Economic and Social Affairs. Sustainable Development:

- History. Available online: https://sdgs.un.org/goals (accessed on 20 January 2021).
- [11] Elkington, J. Enter the Triple Bottom Line. In The Triple Bottom Line: Does It All Add Up; Henriques, A., Richardson, J., Eds.; Taylor & Francis: New York, NY, USA, 2013; pp. 1–16. ISBN 978-1-84407-016-9.
- [12] Svenska Unescorådet. ESD for 2030. Available online: https://unesco.se/wp-content/uploads/2021/03/ESD-for-2030.pdf (accessed on 25 February 2022).
- [13] UNESCO. Education for Sustainable Development: A Roadmap; UNESCO: Paris, France, 2020; ISBN 9789231003943.
- [14] Bexell, S.M.; Sparks, J.L.D.; Tejada, J.; Rechkemmer, A. An Analysis of Inclusion Gaps in Sustainable Development Themes: Findings from A Review of Recent Social Work Literature. Int. Soc. Work 2019, 62, 864–876.
- [15] Karpagavalli, V., & Mohanasoundari, R. (2015). Performance of e-governance in the rural development-Case study on Indian economy. The International Journal of Business & Management, 3(1), 117.
- [16] Anderson, C. A., & Bushman, B. J. (2002). The effects of media violence on society. Science, 295(5564), 2377–2379. https://doi.org/10.1126/science.1070765
- [17] Bateva, S. (2014). Delinquent Behaviour of Children From Dysfunctional Families. International Journal of Cognitive Research in Science, Engineering and Education, 2(2).
- [18] Bi, X., Yang, Y., Li, H., Wang, M., & Zhang, W.
 (2018). Parenting Styles and Parent Adolescent Relationships: The Mediating Roles of Behavioral Autonomy and Parental Authority.
 9(November), 1–13. https://doi.org/10.3389/fpsyg.2018.02187
- [19] Boyes, M., & Allen, S. (1960). Styles of parentchild interaction and moral reasoning in adolescence. Merrill-Palmer Quarterly (1960).
- [20] Danaher, J., & Sætra, H. S. (2022). Technology and moral change: the transformation of truth and trust. Ethics and Information Technology, 24(3). https://doi.org/10.1007/s10676-022-09661-y

- [21] Grusec, J. E., Chaparro, M. P., Johnston, M., & Sherman, A. (2015). The Development of Moral Behavior from a Socialization Perspective. In Handbook of Moral Development. https://doi.org/10.4324/9780203581957.ch6
- [22] Hazra, S., & Mittal, M. (2018). Role of Parenting in Moral Development: An Overview. The International Journal of Indian Psychology, 6(2), 168–175. https://doi.org/10.25215/0602.057
- [23] How, T., & May, E. (2006). Media Effects on Children's Social and Moral Development.
- [24] Killen, M., & Smetana, J. G. (2015). Origins and Development of Morality. In Handbook of Child Psychology and Developmental Science. https://doi.org/10.1002/9781118963418.childpsy 317
- [25] Loudová, I., & Lašek, J. (2015). Parenting Style and its Influence on the Personal and Moral Development of the Child. Procedia Social and Behavioral Sciences, 174, 1247–1254. https://doi.org/10.1016/j.sbspro.2015.01.744
- [26] Nabawy, G. el, Moawad, A., Gad, G., & Ebrahem, S. (2016). The Relationship between use of Technology and Parent-Adolescents Social Relationship. Journal of Education and Practice, 7(14), 168–178.
- [27] Njoroge, R. (2013). Impacts Of Social Media Among The Youth On Behavior Change: A Case Study Of University Students In Selected Universities In Nairobi, Kenya.
- [28] Novković Cvetković, B., Arsić, Z., & Cenić, D. (2022). Attitudes of Teachers to Using Information and Communication Technology in Teaching Advantages and Obstacles. International Journal of Cognitive Research in Science, Engineering and Education, 10(2), 69–76. https://doi.org/10.23947/2334-8496-2022-10-2-69-76
- [29] Panahi, S. (2015). Role of Parents, Teachers, and Community in Adolescents issues. Unique Journal of Pharmaceutical and Biological Sciences, 3(2), 1–11. https://www.researchgate.net/publication/308892 358_Role_of_parents_Teachers_and_Communit y_in_Adolescents_issues

- [30] Richards, R., McGee, R., Williams, S. M., Welch, D., & Hancox, R. J. (2010). Adolescent screen time and attachment to parents and peers. Archives of Pediatrics and Adolescent Medicine. https://doi.org/10.1001/archpediatrics.2009.280
- [31] Schramm, W. (1997). The effects of television on children and adolescents. Adult Education, 43.
- [32] Shurbanovska, O. (2013). Parents And Friends As Factors Of Child's Behavior At School: A Comparison Of Multiple Correlations. In (IJCRSEE) International Journal of Cognitive Research in science, engineering and education (Vol. 1, Issue 1). www.ijcrsee.com
- [33] Tan, W. N., & Yasin, M. (2020). Parents' roles and parenting styles on shaping children's morality. Universal Journal of Educational Research, 8(3 3C), 70–76. https://doi.org/10.13189/ujer.2020.081608
- [34] Termini, K. A., & Golden, J. A. (2014). Moral behaviors: What can behaviorists learn from the developmental literature? International Journal of Behavioral Consultation and Therapy, 3(4), 477–493. https://doi.org/10.1037/h0100818
- [35] Tomé, G. (2012). How Can Peer Group Influence the Behavior of Adolescents: Explanatory Model. 4(2), 26–35. https://doi.org/10.5539/gjhs.v4n2p26
- [36] Turiel, E., Killen, M., & Helwig, C. C. (1987). Morality: Its structure, functions, and vagaries. The Emergence of Morality in Young Children.
- [37] Van der Spoel, M. (2005). How do parental style, family structure, and ethnic background impact on the adolescent's understanding of moral responsibility?
- [38] White, F. A., & Matawie, K. M. (2004). Parental Morality and Family Processes as Predictors of Adolescent Morality. In Journal of Child and Family Studies (Vol. 13, Issue 2).
- [39] Willard, N. (1998). Moral Development in the Information Age. 9.
- [40] O. Mulani and G. N. Shinde, "An approach for robust digital image watermarking using DWT-PCA", Journal of Science and Technology, 2021, Vol.6, Special Issue 1.

- [41] U. P. Nagane and A. O. Mulani, "Moving Object Detection and Tracking Using Matlab", Journal of Science and Technology, 2021, Vol.6, Special Issue 1.
- [42] Kashid, M.M., Karande, K.J., Mulani, A.O. (2022). IoT-Based Environmental Parameter Monitoring Using Machine Learning Approach. In: Kumar, A., Ghinea, G., Merugu, S., Hashimoto, T. (eds) Proceedings of the International Conference on Cognitive and Intelligent Computing. Cognitive Science and Technology. Springer, Singapore. https://doi.org/10.1007/978-981-19-2350-0_5
- [43] Pratima Amol Kalyankar, Altaf O. Mulani, Sampada P. Thigale, Pranali Gajanan Chavhan and Makarand M. Jadhav, "Scalable face image retrieval using AESC technique", Journal Of Algebraic Statistics Volume 13, No. 3, p. 173 – 176, 2022
- [44] P. B. Mane and A. O. Mulani, "High throughput and area efficient FPGA implementation of AES algorithm", International Journal of Engineering and Advanced Technology, Vol. 8, Issue 4, April 2019
- [45] O. Mulani and P. B. Mane, "Secure and area Efficient Implementation of Digital Image Watermarking on Reconfigurable Platform", International Journal of Innovative Technology and Exploring Engineering, Vol. 8, Issue 2,Dec. 2018
- [46] Kulkarni P.R., Mulani A.O. and Mane P. B., "Robust Invisible Watermarking for Image Authentication", In Emerging Trends in Electrical, Communications and Information Technologies, Lecture Notes in Electrical Engineering, vol. 394,pp. 193-200, Springer, Singapore, 2017.
- [47] A.O.Mulani and P.B.Mane, "Watermarking and Cryptography Based Image Authentication on Reconfigurable Platform", Bulletin of Electrical Engineering and Informatics, Vol.6 No.2, pp 181-187.2017

- [48] A.O.Mulani and P.B.Mane, "Area Efficient High Speed FPGA Based Invisible Watermarking for Image Authentication", Indian Journal of Science and Technology, Vol.9. No.39, Oct. 2016. ISSN 0974-5645
- [49] S. S. Swami and A. O. Mulani, "An efficient FPGA implementation of discrete wavelet transform for image compression," 2017 International Conference Energy, Communication, Data Analytics and Soft Computing (ICECDS), Chennai, India, 2017, pp. 3385-3389, 10.1109/ICECDS.2017.8390088.
- [50] H. S. Deshpande, K. J. Karande and A. O. Mulani, "Area optimized implementation of AES algorithm on FPGA," 2015 International Conference on Communications and Signal Processing (ICCSP), Melmaruvathur, India, 2015, pp. 0010-0014, doi: 10.1109/ICCSP.2015.7322746.
- [51] O. Mulani and P. B. Mane, "Area optimization of cryptographic algorithm on less dense reconfigurable platform," 2014 International Conference on Smart Structures and Systems (ICSSS), Chennai, India, 2014, pp. 86-89, doi: 10.1109/ICSSS.2014.7006201.
- [52] J. Mandwale and A. O. Mulani, "Different Approaches For Implementation of Viterbi decoder on reconfigurable platform," 2015 International Conference on Pervasive Computing (ICPC), Pune, India, 2015, pp. 1-4, doi: 10.1109/PERVASIVE.2015.7086976.
- [53] H. S. Deshpande, K. J. Karande and A. O. Mulani, "Efficient implementation of AES algorithm on FPGA," 2014 International Conference on Communication and Signal Processing, Melmaruvathur, India, 2014, pp. 1895-1899, doi: 10.1109/ICCSP.2014.6950174.
- [54] Hemlata M. Jadhav; Altaf Mulani; Makarand M. Jadhav, "Design and Development of Chatbot Based on Reinforcement Learning," in Machine Learning Algorithms for Signal and Image Processing, IEEE, 2023, pp.219-229, doi: 10.1002/9781119861850.ch12.