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Emotional Regulation as a Predictor of Peer Relationship and Assertiveness among Adolescents

Puspanjali Borthakur* and Sudhesh N.T**

Abstract

Emotion regulation skills develop substantially across adolescence, a period characterized by emotional challenges and developing regulatory neural circuitry. During this time, when young people are developing autonomy from their parents, peers become a significant source of social and emotional support. Experience with assertiveness strategies, which organize the adolescent's social competence, is mutually and individually beneficial to those involved in interpersonal relationships also. The current study examines if there is any relationship between emotional regulation as being the predicting factor for peer relationship and assertiveness among adolescents. Also, to see if there exists any gender difference in emotional regulation, peer relationship and assertiveness among adolescents. The sample consists of 400 male and female adolescent students from 8th and 9th classes ranging from the age of 13-15 years. This study used 3 questionnaires - Difficulties in emotional regulation scale- short form (DERS-SF), Index of Peer Relation (IPR), and Rathus Assertiveness Schedule (RAS). A Correlational Research design and Path Analysis was done to analyse the data. Results revealed that there is a statistically significant and positive relationship between emotional regulation and peer relationship, but there is no significant relationship between emotional regulation and assertiveness and assertiveness and peer relationship is negatively correlated, which is not statistically significant. The findings also indicate that emotional regulation is a predictor for peer relationship, but it is not a predictor for assertiveness. Gender differences is seen in peer relationship and assertiveness and male adolescents are seen being more assertive and having better peer relationship than female adolescents in this study.

Keywords

Emotional regulation, peer relationship, assertiveness

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Introduction

Emotion self-regulation belongs to the broader set of emotion-regulation processes, which includes the regulation of one's own feelings and the regulation of other people's feelings (Niven et al., 2009, Bruman et al., 2015). Adolescence, a phase of gradual transition between childhood and adulthood (commonly considered to be the age range from roughly 12 to 18 years), is also relevant for emotion regulation because it is a period with fast and fundamental alterations in biological, cognitive, social, and emotional domains (Blakemore, 2008). Emotional regulation has been broadly defined as the monitoring, evaluation and modification of emotional reactions in order to accomplish goals. This can include both implicit emotion regulations, i.e. processes which occur automatically and largely outside conscious awareness and occur at very early stages of the emotion regulation process, and explicit emotion regulation, which involves using conscious strategies to modify emotional responses (Ahmed, Hewitt, & Sebastian, 2015).

Emotional dysregulation occurs when the adolescent is unable to effectively use strategies to regulate intense or overwhelming emotions experienced and as a result, has implications for mental health including prolonged mental illness, risky behavior, admittance of adolescents into mental health facilities and suicide (Strauss et al., 2016). Peer relationships are very influential in adolescence. During this time, when young people are developing autonomy from their parents, peers become a significant source of social and emotional support. This increased group cohesion is due to the changing quality of teens' relationships. The increased vulnerability and emotional closeness of adolescent peer relationships require more trust; thus, there is a greater commitment and allegiance to their peer group. In fact, adolescent/teens will often connect with other teens those who have similar problems or situations as they look for social acceptance from other sources than their parents (Gorrese & Ruggieri, 2012). Assertiveness does not develop independently but depends on other communication skills. Experience with assertiveness strategies, which organize the adolescent's social competence, is mutually and individually beneficial to those involved in interpersonal relationships (Castedo, Juste, & Alonso, 2015). Sarkova (2013) describes how different studies have explored the relationship between adolescent's mental health and assertiveness and that there are certain variables that influences assertiveness which includes psychological distress, culture, and depression and so on.

Review of Literature

It is well documented how social circumstances, specifically the presence of peers, place high levels of stress and highly emotional arousal among young adolescents, and situations that expose them to the possibility of being negatively evaluated by their peers cause a considerable decrease in their self-regulatory capacity, lower assertiveness and mited decision-making strategies as stated by researchers such as (Garnefski&Kraaij, 2006; Guyer et al., 2014; Silvers McRae, Gabrieli, Gross, Remy, & Ochsner, 2012; Steinberg, 2008; Thompson et al., 2013; Van der Graaff, Branje, DeWied, Hawk, Van Lier, &Meeus, 2014; Zeman et al., 2006). Rohrbeck (2003) stated that as children enter to their adolescent stage the time, they spend with their peers tend to increase. Perceived quality of both parent and peer attachments is related to psychological well-being of adolescents. Papini et al. (1988) describes in their study that decline or reduction in the use of affective interactions and increase in the use of assertive statements and interactions leads to redefined family and peer relationships during pubertal development in adolescents

Method

Correlation research design and Path Analysis was used in this study to see if there any relationship between emotional regulation, peer relationship and assertiveness among adolescents. The sample size consists of 400 adolescents, students between the age group between 13- 15 years were considered. This study used 3 questionnaires - Difficulties in emotional regulation scale- short form (DERS-SF), Index of Peer Relation (IPR), and Rathus Assertiveness Schedule (RAS).

Procedure

Once the research proposal was approved permission to administer and collect data using the appropriate tools was taken from the school authority through proper channels. Institutional consent form was signed and sealed by the respective principals and school counselors. After that a convenient time was fixed and the data was collected. Participants were debriefed with the informed consent form and demographic data sheet followed by the three questionnaires which was then administered with appropriate instructions. The participants were informed that their answers would be kept confidential. The printed instructions on the questionnaires will also be read aloud and explained. The scores were then computed in a password protected excel sheet and analyzed in “Statistical Package for the Social Sciences” (SPSS) 21st version, and the required interpretation of the re-

sults was done and discussed.

Results and discussion

Table 1
Sample distribution

Gender	N	Percentage
Male	235	59.5
Female	162	40.5

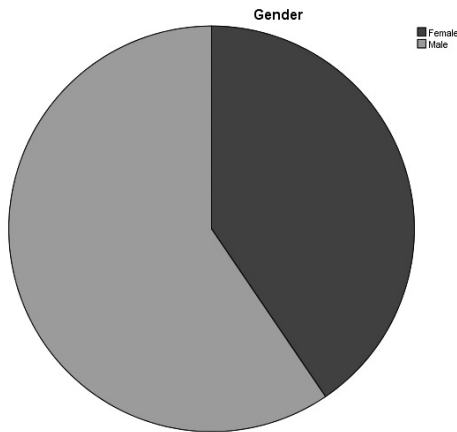


Figure 2. Pie-diagram of Gender distribution

The table 1 and figure 2. shows the gender distribution in this study, it can be clearly seen that the male respondents constituted the majority of the sample at 59.5% and the female respondents constituted 40.5% of the sample. Since there is a difference in the percentage of male and female respondents, Levene's test for equality of variance was done to check the homogeneity of the groups and the result was significant.

Table 2

Descriptive statistics with correlation coefficient scores of emotional regulation, peer relationship and assertiveness

Variables	Mean	SD	W	1	2
Emotional Regulation (1)	48.13	11.24	.994*		
Peer Relationship (2)	25.76	18.17	.998*	.190**	
Assertiveness (3)	11.95	16.61	.998*	.015	-.044

* $p > .05$, ** $p < 0.05$

The obtained data was not normally distributed hence the two-step normalization method was used to transform the non-normal data into normal data. Pearson correlation was done to test the hypothesis and the results are represented in the table 3. The table shows mean, standard deviation, shapiro-wilk score and correlation coefficient scores of the variables. The mean and standard deviation of emotional regulation, peer relationship and assertiveness are $M= 48.18$ ($SD=11.24$), $M= 25.76$ ($SD= 18.17$), $M= 11.95$ ($SD= 16.61$), and the correlation coefficient between emotional regulation and peer relationship is $r=.190$ ($p= .000$), between emotional regulation and assertiveness is $r= .015$ ($p=.770$), between assertiveness and peer relationship is $r= -.044$ ($p= .378$).

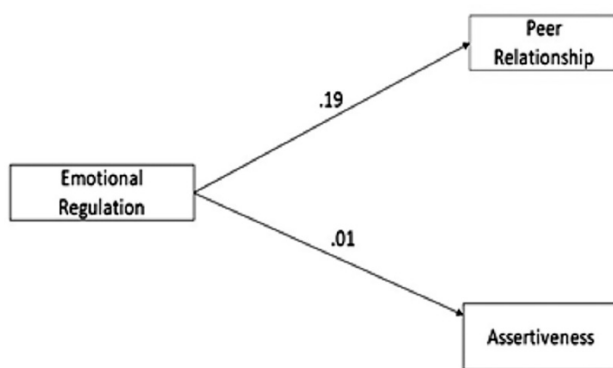


Figure 3. Path diagram showing the relationship between variables

Table 3

Path analysis of Emotional regulation, Peer relationship and Assertiveness

Variables		B	r ²	χ^2	GFI	NFI
Dependent	Independent					
Peer relationship	<--- Emotional regulation	.190**	.04	.92	.998	.942
Assertiveness	<--- Emotional regulation	.015	.01			

** $p < .01$

From Table 3, it is found that the emotional regulation explains 4% of the variance in peer relationship ($r^2= .04$), it also shows the emotional regulation significantly predicts

peer relationship ($\beta= .190$, $p<.01$). The goodness of fit index ($GFI=.998$) and normed fit index ($NFI=.942$) are $\geq .95$. Thus, the model is good fit.

Table 4 indicates the difference between genders and if there is any dif-

ference seen in the areas of emotional regulation, peer relationship and assertiveness. For peer relationship females scored (M= 23.4, SD= 18.15) and males scored (M= 27.35, SD= 18.03) with (t= 2.142, p=.003) which is significant. For assertiveness females scored (M= 9.26, SD= 17.25) and males scored (M= 13.77, SD= 15.94) with (t= -2.688, p= .007) which is also significant. There is no significant gender difference identified in emotional regulation.

Table 4

t-test values comparing the gender groups/differences on emotional regulation, peer relationship and assertiveness

Variables	Group	N	Mean	SD	t-value	Sig.Level
Emotional Regulation	Male	238	47.9	11.31	.592	.554
	Female	162	48.58	11.16		
Peer Relationship	Male	238	27.35	18.03	-2.142	.003*
	Female	162	23.41	18.15		
Assertiveness	Male	238	13.77	15.94	-2.688	.007**
	Female	162	9.26	17.25		

*p<0.05, **p<0.01

Discussion

This section discusses the results of the current study with reference to literature review, it is divided into segments that deals with the hypotheses formulated and attempts to examine if the empirical data produced supports these hypotheses. This section basically concludes by discussing and highlighting the main findings of the study.

Hypothesis 1. There is a significant relationship between emotional regulation, peer relationship and assertiveness among adolescents.

To test the first hypothesis the Pearson correlation was performed to see if there is any relationship among the independent and the dependent variables. The results indicated that there is a statistically significant and positive relationship between emotional regulation and peer relationship (r=.190, p= .000), but results also depicts that there is no significant relationship between emotional regulation and assertiveness (r= .015, p=.770), and results also shows that assertiveness and peer relationship is negatively correlated (r= -.044, p= .378), which is not statistically significant. Hence it can be stated that the hypothesis is partially accepted. Previous studies

do support this hypothesis. Stone et al. (2018) in their study examined the effectiveness of using social and non-social emotional regulation strategies in regulating negative affect (NA) among 170 anxious youth between the age range of (9-14). The study described that using social regulation strategies with social support from peers and parents is effective in regulating negative affect (NA) among youth falling under the spectrum of anxiousness. King, McLaughlin, Silk, and Monahan (2017) examined in their study the peer effects on self-regulation on adolescents based on the nature of peer interaction. The study examined how acceptance or rejection from online or virtual peers can influence multiple dimensions of self-regulation with a sample of 273 adolescents. The findings suggest that different dimensions of adolescent's self-regulation are influenced by the nature of the peer context: basic cognitive functions are altered by mere exposure to peers, whereas more complex decision making and emotion regulation processes are influenced primarily by the quality of that exposure.

Hypothesis 2. Emotional regulation is a predictor of peer relationship and assertiveness among adolescents.

To test the second hypothesis the Path analysis method was used to see if emotional regulation becomes the predicting factor of peer relationship and assertiveness. The results represented in table 3 and figure 3., indicates that there is a 4% influence of emotional regulation on peer relationship showing it is statistically significant whereas there is only 1% influence of emotional regulation on assertiveness stating it being statistically not significant. The GFI and NFI are $\geq .95$. Thus, the model is good fit which means that the model has the ability to reproduce that data being reasonably consistent and does not require respecification. Thus, the findings indicate that emotional regulation is a predictor for peer relationship ($p < .01$), which shows it is significant but it is not a predictor for assertiveness stating it being statistically not significant. Hence it can be stated that the hypothesis is partially accepted. Blair et al. (2016) in their study had also used a path analysis and proposed a process model to examine the indirect effects of emotional regulation on peer acceptance and rejection via positive and negative social behaviour with a sample of 338 children's. Model Fit for all analyses was examined using the chi-square goodness of Fit statistic, and the CFI, GFI values indicate a good model fit. The results from the study shows that there were no direct effects from emotion regulation to either peer acceptance or peer rejection, but emotion regulation was significantly related to later peer rejection and acceptance indirectly through these social behaviours that supported their theoretical proposition that

emotion regulation is a critical foundation for developing social behaviors that peers are either attracted to or repelled by, and therefore improving regulatory abilities.

Hypothesis 3. There is a gender difference in emotional regulation, peer relationship and assertiveness among adolescents.

To test the third hypothesis a type of inferential statistics called a t-test was used to determine if there is a significant difference between the two gender groups on emotional regulation, peer relationship and assertiveness. The results indicate that for emotional regulation the difference between the mean scores are almost negligible and the t-value obtained is not statistically significant. Hence there is no gender difference. For peer relationship and assertiveness, the mean scores show a significant difference and the t-values obtained are statistically significant at 0.05 level and 0.01 level which shows that there is a gender difference in these two areas. The results indicate that male adolescents are more assertive than female adolescents. Bourke (2002) in his study examines the gender differences in terms of their personality among adolescents, with 1070 school students (606 females, 464 males). The HSPQ (High school personality questionnaire) was used that has 14 primary personality characteristics and assertiveness was one among them. The findings of the study showed that male adolescents were more assertive than female adolescents. The current study also depicts male adolescents has better peer relationship than female adolescents. Felton, Cole, Havewala, Kurdziel, and Brown (2018) based their study on understanding relations among co-rumination, peer relationship and rumination among adolescents with a sample size of 360 participants (43% boys) between the age range of 9-15 and the results indicated that girls experiences better peer relationship/ friendship quality than boys, according to the study positive friendship quality led to increase in co-rumination and co-rumination leading to increase in positive friendship quality/ peer relationship and this was witnessed more among the girls adolescents in their study than male adolescents. It was hypothesized that “there will be a significant gender difference in emotional regulation, peer relationship and assertiveness”, but there is no gender difference seen in emotional regulation whereas it was seen in peer relationship and assertiveness, hence it can be stated that the hypothesis is partially accepted.

Summary and Conclusion

This is a quantitative study that was conducted to analyze if emotional regulation is a predictor of peer relationship and assertiveness. The sampling

method used was Purposive sampling to obtain data. Since the target population is adolescents and there is an age criterion set for the participants of this study hence the purposive sampling method was being used. The variables studied were- emotional regulation (IV), peer relationship and assertiveness (DV). Correlation Research Design along with path analysis method was used in this study to see if there is any relationship between emotional regulation, peer relationship and assertiveness among adolescents and if emotional regulation is a predictor of both the dependent variables. The number of participants involved in the study was 400 adolescents, both males (238) and females (162) between the age of 13-15 years old. The independent t-test was used to understand and analyze the gender differences in both the groups in this study.

A set of three questionnaires (Difficulties in emotion regulation scale short form, Rathus assertiveness schedule, Index of peer relations) were administered on the participants and demographic sheet, informed consent and institutional consent forms were used to grant the required permissions and to maintain the aspect of confidentiality. Most of the previous studies brought out the indirect connection between emotional regulation, peer relationship and assertiveness, studies showed how peer abuse and substance abuse led to poor emotional regulation, or how emotional regulation is connected to resilience and strategies among adolescents, their well-being, assertive abilities, self-esteem, peer competence and so on which became the base foundation for this study to examine if there any direct relationship between these variables.

Main findings of the research study

1. There is a statistically significant positive correlation between emotional regulation and peer relationship, but there was no significant relationship between emotional regulation and assertiveness. There was a significantly negative correlation between assertiveness and peer relationship.
2. It is statistically proven that emotional regulation is a predictor of peer relationship but it is not a predictor for assertiveness based on the results obtained from the data.
3. There is a statistically significant difference between the two gender groups in the study. There is no gender difference seen in emotional regulation but it was seen in peer relationship and assertiveness. The results indicate that male adolescents are more assertive and have peer relationship then adolescent females.

Conclusion

In conclusion, this study has shown that emotional regulation is a predicting factor for peer relationship but it isn't for assertiveness when considered together, although there are studies that shows it being the predictor of both individually or with other variables but in this study based on the results the hypotheses has been partially accepted and there are studies stated above that becomes the evidence for it. It also highlights the areas of assertiveness and peer relationship among adolescences that needs to be paid attention to for better development of adolescents.

Implications of the study

This study helps us understand the role of emotional regulation in improving better peer relationships among adolescents. This can imply that parents, teachers, closed ones need to pay attention towards helping adolescents in dealing better with their peers via adopting a healthy way of regulating their emotions. It also provides an opportunity in understanding that there are probably various other factors that comes up such as technology, lifestyles, for example adolescents have adopted technology closer than their parents or peers hence level of assertiveness seems to be ineffective irrespective of having a good or bad regulation. It paves way for schools and mental health professionals in understanding and modifying ways and techniques that can be used to help adolescents build good level of assertiveness through better training models, and bring out healthy methods to develop a positive peer relationship. This study also provides an opportunity for creating interventions aimed specifically at improving adolescent's social skills and peer success, helping them develop a better attitude towards their social support system.

Limitations

This study aimed at understanding if emotional regulation is a predictor for both peer relationship and assertiveness. However, it was only partially achieved as it is only a predictor for peer relationship, but not for assertiveness, hence further research in this area needs to be studied independently. The sample size wasn't enough to draw major conclusions; if it was a larger number then the results could be generalized in a better manner. Adolescents from private schools in Bangalore alone were selected for the study which can be considered as a limitation. Another limitation to be considered is the lack of studies done in India about adolescents regarding their emotional regulation, assertiveness and peer relationship. Time was another major constraint in this study. The questionnaires conducted

were self-report measures, and the adolescent participants may not have answered truthfully to all the questions and responded in a socially acceptable manner or what they thought matched the researcher's expectations, hence this could be another limitation in the study.

Scope for further research

Further research in this area could be directed towards modifying the research methodology, maybe a qualitative and quantitative mixed approach, or examining longitudinal effects of these variables on each other can be done. More sample size can be considered for better results. Considering other sampling methods and choosing the participants probably from different levels of socio-economic backgrounds, both urban and rural population, private and public schools could be considered for future researches. Future researches can also focus on examining and identifying various other external/internal and potential factors that can become potential predictors or mediators to the relationship between emotional regulation, peer relationship and assertiveness. Future research can focus on developing a specific model that can help adolescents to become more aware of how to regulate their emotions, be better assertive and more connected to a healthy social circle so they don't face any psychological distress of major kind.

References

- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16(5), 427-454. doi:10.1007/bf02202939
- Agarwal, S., & Poojitha, R. (2017). Parent and peer attachment and assertiveness in college students. *International Journal of Indian Psychology*, 4(3), 138-150.
- Ahmed, S. P., Bittencourt-Hewitt, A., & Sebastian, C. L. (2015). Neurocognitive bases of emotion regulation development in adolescence. *Developmental Cognitive Neuroscience*, 15, 11–25. doi: 10.1016/j.dcn.2015.07.006
- Burman, J. T., Green, C. D., & Shanker, S. (2015). On the Meanings of Self-Regulation Digital Humanities in Service of Conceptual Clarity. *Child Development*, 86(5), 1507-1521. doi:10.1111/cdev.12395. PMID 26234744.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Multifaceted Impact of Self-Efficacy Beliefs on Academic Functioning. *Child Development*, 67(3), 1206-1222. doi:10.1111/j.1467-8624.1996.tb01791.x
- Blair, B. L., Gangel, M. J., Perry, N. B., O'Brien, M., Calkins, S. D., Keane, S. P., & Shanahan, L. (2016). Indirect Effects of Emotion Regulation on Peer Acceptance and Rejection: The Roles of Positive and Negative Social Behaviors. *Merrill-Palmer Quarterly*, 62(4), 415. doi: 10.13110/merr-palquar1982.62.4.0415

- Blakemore, S.-J. (2008). Development of the Social Brain in Adolescence. *Self-Regulation in Adolescence*, 61(1), 193–211. doi: 10.1017/cbo9781139565790.010
- Bourke, R. (2002). Gender differences in personality among adolescents. *Psychology, Evolution & Gender*, 4(1), 31–41. doi: 10.1080/1461666021000013724
- Brown, B. B., & Prinstein, M. J. (2011). *Encyclopedia of Adolescence*. Elsevier Inc. DOI: 10.1016/C2009-1-03841-6
- Cole, P. M., Michel, M. K., & Teti, L. O. (1994). The development of emotion regulation and dysregulation: A clinical perspective. *Monographs of the Society for Research in Child Development*, 59(203), 73-102. Retrieved from JSTOR 1166139.
- Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion Regulation as a Scientific Construct: Methodological Challenges and Directions for Child Development Research. *Child Development*, 75(2), 317–333. doi:10.1111/j.1467-8624.2004.00673.x
- Compas, B. E., Jaser, S. S., Bettis, A. H., Watson, K. H., Gruhn, M. A., Dunbar, J. P., & Thigpen, J. C. (2017). Coping, emotion regulation, and psychopathology in childhood and adolescence: A meta-analysis and narrative review. *Psychological Bulletin*, 143(9), 939.
- Carducci, D. J. (1980). Positive Peer Culture and Assertiveness Training: Complementary Modalities for Dealing with Disturbed and Disturbing Adolescents in the Classroom. *Behavioral Disorders*, 5(3), 156-162. doi:10.1177/019874298000500301
- Contreras, J. M., Kerns, K. A., Weimer, B. L., Gentzler, A. L., & Tomich, P. L. (2000). Emotion regulation as a mediator of associations between mother-child attachment and peer relationships in middle childhood. *Journal of Family Psychology*, 14(1), 111. Retrieved from <http://psycnet.apa.org/buy/2000-13848-00>
- Desiatnikov, A. (2014). *Emotion Regulation in Adolescents: Influences of Social Cognition and Object Relations – An ERP study* (Unpublished master's thesis). University College London.
- Eisenberg, N., & Spinrad, T. L. (2004). Emotion-Related Regulation: Sharpening the Definition. *Child Development*, 75(2), 334–339. doi: 10.1111/j.1467-8624.2004.00674.x
- Eisenberg, N., Michalik, N., Spinrad, T. L., Hofer, C., Kupfer, A., Valiente, C., Reiser, M. (2007). The relations of effortful control and impulsivity to children's sympathy: A longitudinal study. *Cognitive Development*, 22(4), 544–567. doi: 10.1016/j.cogdev.2007.08.003
- Eslami, A. A., Rabiei, L., Afzali, S. M., Hamidzadeh, S., & Masoudi, R. (2016). The Effectiveness of Assertiveness Training on the Levels of Stress, Anxiety, and Depression of High School Students. *Iranian Red Crescent Medical Journal*, 18(1). doi:10.5812/ircmj.21096
- Felton, J. W., Cole, D. A., Havewala, M., Kurdziel, G., & Brown, V. (2018). Talking Together, Thinking Alone: Relations among Co-Rumination, Peer Relationships, and Rumination. *Journal of Youth and Adolescence*, 48(4), 731–743. doi: 10.1007/s10964-018-0937-z
- Fragoso, C. G., Benítez, Y. G., Rodríguez, D. J., & Olán, R. J. (2017). Relationship between Assertiveness, Academic Performance and Anxiety in a Sample of Mexican Students in Secondary Education. *Acta Colombiana De Psicología*, 21(1), 116-138. doi:10.14718/acp.2018.21.1.6

- Garnefski, N., & Kraaij, V. (2006). Relationships between cognitive emotion regulation strategies and depressive symptoms: A comparative study of five specific samples. *Personality and Individual Differences, 40*(8), 1659-1669. doi:10.1016/j.paid.2005.12.009
- Graaff, J. V., Branje, S., Wied, M. D., Hawk, S., Lier, P. V., & Meeus, W. (2014). Perspective taking and empathic concern in adolescence: Gender differences in developmental changes. *Developmental Psychology, 50*(3), 881-888. doi:10.1037/a0034325
- Gratz, K. L., & Roemer, L. (2004). Multidimensional Assessment of Emotion Regulation and Dysregulation: Development, Factor Structure, and Initial Validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment, 26*(1), 41-54. doi:10.1023/b:joba.0000007455.08539.94
- Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. In *Psychophysiology, 39*, 281-291.
- Gross, J. J. (2008). Emotion regulation. *Handbook of emotions 3*(3), 497-513. New York, London: Guilford Press.
- Guyer, A. E., Caouette, J. D., Lee, C. C., & Ruiz, S. K. (2014). Will they like me? Adolescents' emotional responses to peer evaluation. *International Journal of Behavioral Development, 38*(2), 155-163. doi: 10.1177/0165025413515627
- Hochschild, A. R. (1983). *The managed heart* (Unpublished master's thesis). Berkeley: University of California Press.
- Hofmann, S. G. (2014). Interpersonal Emotion Regulation Model of Mood and Anxiety Disorders. *Cognitive Therapy and Research, 38*(5), 483-492. doi:10.1007/s10608-014-9620-1
- Huli, P. R. (2014). Stress Management in Adolescence. *Journal of Research in Humanities and Social Science, 2*(7), 50-57. Retrieved from <http://www.quest-journals.org/jrhss/papers/vol2-issue7/H275057.pdf>
- Hurlock, E. B. (1980). *Developmental psychology: A life-span approach*. New York: McGraw-Hill.
- Hurlock, E. B. (2001). *Developmental psychology: A life-span approach* (5th Ed.). Tata McGraw-Hill: New Delhi.
- Kaufman, E. A., Xia, M., Fosco, G., Yaptangco, M., Skidmore, C. R., & Crowell, S. E. (2015). The difficulties in emotion regulation scale short form (DERS-SF): Validation and replication in adolescent and adult samples. *Journal of Psychopathology and Behavioral Assessment*, doi:10.1007/s10862-015-9529-3
- King, K. M., McLaughlin, K. A., Silk, J., & Monahan, K. C. (2017). Peer effects on self-regulation in adolescence depend on the nature and quality of the peer interaction. *Development and Psychopathology, 30*(4), 1389-1401. doi: 10.1017/s0954579417001560
- Klein, Beltran, & Sowers-Hong. (1993). Index of Peer Relations. Retrieved from <https://www.walmyr.com/PDFs/IPRSAMPLE.pdf>
- Klemanski, D. H., Curtiss, J., McLaughlin, K. A., & Nolen-Hoeksema, S. (2017). Emotion regulation and the transdiagnostic role of repetitive negative thinking in adolescents with social anxiety and depression. *Cognitive Therapy and*

Research, 41(2), 206-219.

- La Greca, A. M., & Harrison, H. M. (2005). Adolescent peer relations, friendships, and romantic relationships: Do they predict social anxiety and depression?. *Journal of Clinical Child and Adolescent Psychology*, 34(1), 49-61.
- McLeod, S. A. (2018, May 03). Erik Erikson's stages of psychosocial development. Retrieved from <https://www.simplypsychology.org/Erik-Erikson.html>
- Mestre, J. M., Núñez-Lozano, J. M., Gómez-Molinero, R., Zayas, A., & Guil, R. (2017). Emotion Regulation Ability and Resilience in a Sample of Adolescents from a Suburban Area. *Frontiers in Psychology*, 8, 1980. <http://doi.org/10.3389/fpsyg.2017.01980>
- Mikami, A. Y., Szewedo, D. E., Allen, J. P., Evans, M. A., & Hare, A. L. (2010). Adolescent Peer Relationships and Behavior Problems Predict Young Adults' Communication on Social Networking Websites. *Developmental Psychology*, 46(1), 46-56. <http://doi.org/10.1037/a0017420>
- Morgan, C. T., Rosen, J. W., Morgan, C. T., & King, R. A. (1975). Study guide for Morgan and King Introduction to psychology: Fifth edition. New York: McGraw-Hill.
- Morris, A. S., Criss, M. M., Silk, J. S., & Houtberg, B. J. (2017). The impact of parenting on emotion regulation during childhood and adolescence. *Child Development Perspectives*, 11(4), 233-238.
- Niven, K., Totterdell, P., & Holman, D. (2009). A classification of controlled interpersonal affect regulation strategies. *Emotions*, 9, 498-509. doi:10.1037/a0015962
- Parray, W. M., & Kumar, S. (2016). Assertiveness among Undergraduate Students of the University. *The International Journal of Indian Psychology*, 4(1), 283-291.
- Papini, D. R., Datan, N., & McCluskey-Fawcett, K. A. (1988). An observational study of affective and assertive family interactions during adolescence. *Journal of Youth and Adolescence*, 17(6), 477-492.
- Pagin, & Peter. (2016). Assertion, *The Stanford Encyclopedia of Philosophy*. Retrieved from <https://plato.stanford.edu/archives/win2016/entries/assertion>
- Pickhardt, C. E. (2010, July 19). Adolescence and emotion. Retrieved from <https://www.psychologytoday.com/us/blog/surviving-your-childs-adolescence/201007/adolescence-and-emotion>
- Reece, R., & Willborn, B. (1980). Adolescent Assertiveness: Problems and Programs. *The School Counselor*, 27(4), 276-282. Retrieved from <http://www.jstor.org/stable/23903345>
- Rohrbeck C.A. (2003) Peer Relationships, Adolescence. In: Gullotta T.P. et al. (eds) *Encyclopedia of Primary Prevention and Health Promotion*. Springer, Boston, MA. https://doi.org/10.1007/978-1-4615-0195-4_118
- Rudolph, K. D. (2010). Implicit Theories of Peer Relationships. *Social Development (Oxford, England)*, 19(1), 113-129. <http://doi.org/10.1111/j.1467-9507.2008.00534.x>
- Rubin, K. H., Coplan, R., Chen, X., Bowker, J., Kristina, L., & McDonald Harris, R. J. (1995). Where is the child's environment? A group socialization theory of development. *Psychological Review*, 102(3), 458-489.
- Sabatier, Colette, Restrepo Cervantes, Dayana, Moreno Torres, Mayilín, Hoyos De

- los Rios, Olga, & Palacio Sañudo, Jorge. (2017). Emotion Regulation in Children and Adolescents: concepts, processes and influences. *Psicología desde el Caribe*, 34(1), 101-110. Retrieved September 18, 2018, from http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0123417X2017000100101&ng=en&tlng=en.
- Santrock, J. W. (2011). *Adolescence* (12th Ed.). Tata McGraw-Hill: New Delhi.
- Sarkova, M., Bacikova Sleskova, M., Orosova, O., MadarasovaGeckova, A., Katre- niakova, Z., Klein, D., & van Dijk, J. P. (2013). Associations between assertive- ness, psychological well-being, and self-esteem in adolescents. *Journal of Applied Social Psychology*, 43(1), 147-154.
- Shekhar, C., & Pangotra, A. (2017). Difficulties in emotional regulation, loneliness and self-esteem among adolescence. *International Journal of Applied Social Science*, 4 (5&6), 117–124.
- Silvers, J. A., McRae, K., Gabrieli, J. D., Gross, J. J., Remy, K. A., & Ochsner, K. N. (2012). Age-related differences in emotional reactivity, regulation, and rejection sensitivity in adolescence. *Emotion*, 12(6), 1235-1247. doi:10.1037/a0028297
- Spinrad, T. L., Eisenberg, N., Cumberland, A., Fabes, R. A., Valiente, C., Shepard, S. A., Guthrie, I. K. (2006). Relation of emotion-related regulation to childrens social competence: A longitudinal study. *Emotion*, 6(3), 498–510. doi: 10.1037/ 1528-3542.6.3.498
- Steinberg, L. (2008). A social neuroscience perspective on adolescent risk taking. *Developmental Review*, 28(1), 78-106. doi:10.1016/j.dr.2007.08.002
- Stone, L. B., Mennies, R. J., Waller, J. M., Ladouceur, C. D., Forbes, E. E., Ryan, N. D., Silk, J. S. (2018). Help me Feel Better! Ecological Momentary Assessment of Anxious Youths' Emotion Regulation with Parents and Peers. *Journal of Abnormal Child Psychology*, 47(2), 313–324. doi: 10.1007/s10802-018-0454-2
- Strauss, M., Raubenheimer, J. E., Campher, D., Coetzee, C., Diedericks, A., Gevers, H., Niekirk, S. V. (2016). The development of an emotional regulation scale for adolescents. *South African Journal of Occupational Therapy*, 46(3). doi: 10.17159/2310-3833/2016/v46n3a8
- Sullivan, H. S. (1953). *The Interpersonal Theory of Psychiatry*. New York: Norton & Co.
- Theurel, A., & Gentaz, E. (2018). The regulation of emotions in adolescents: Age differences and emotion-specific patterns. *Plos One*, 13(6). doi:10.1371/journal.pone.0195501
- Thompson, R. A., Virmani, E. A., Waters, S. F., Raikes, H. A., & Meyer, S. (2013). The development of emotion self-regulation: The whole and the sum of the parts. *Handbook of Self-regulatory Processes in Development*, 5-26.
- Tomé, G., de Matos, M. G., Simões, C., Camacho, I., & AlvesDiniz, J. (2012). How Can Peer Group Influence the Behavior of Adolescents: Explanatory Model. *Global Journal of Health Science*, 4(2), 26–35. <http://doi.org/10.5539/gjhs.v4n2p26>
- Townsend, M. C. (2012). *Journal of Psychiatry mental health and nursing* (pp. 43-46). Jaypee publications.
- Trentacosta, C. J., & Shaw, D. S. (2009). Emotional self-regulation, peer rejection, and antisocial behavior: Developmental associations from early childhood to early adolescence. *Journal of Applied Developmental Psychology*, 30(3), 356-

365. doi:10.1016/j.appdev.2008.12.016

- Tung, S., & Sandhu, D. (2005). Well-being in Indian adolescents: Role of emotional Autonomy and identity formation of adolescents. *Pakistan Journal of Psychological Research*, 20(3-4), 81-91.
- Wills, T. A., Pokhrel, P., Morehouse, E., & Fenster, B. (2011). Behavioral and Emotional Regulation and Adolescent Substance Use Problems: A Test of Moderation Effects in a Dual-Process Model. *Psychology of Addictive Behaviors : Journal of the Society of Psychologists in Addictive Behaviors*, 25(2), 279–292. <http://doi.org/10.1037/a0022870>
- Wehr, S. H., & Kaufman, M. E. (1987). The effects of assertive training on performance in highly anxious adolescents. *Adolescence*, 22(85), 195.<https://search.proquest.com/openview/03b679c1c8463fc96d4cf9f0d0e3bbb5/1?pq-orig-site=gscholar&cbl=1819054>
- Young, K. S., Sandman, C. F., & Craske, M. G. (2019). Positive and negative emotion regulation in adolescence: links to anxiety and depression, 9(4). doi: 10.3390/brainsci9040076.
- Zaki, J., & Williams, C. W. (2013). Interpersonal emotion regulation. *Emotion*, 13(5), 803-10. doi:10.1037/a0033839
- Zeman, J.; Cassano, M.; Perry-Parrish, C.; Stegall, S. (2006). Emotion regulation in children and adolescents. *Journal of Developmental and Behavioral Pediatrics*. 27 (2), 155–168. doi:10.1097/00004703-200604000-00014.
- Zeman, J., & Garber, J. (1996). Display rules for anger, sadness, and pain: It depends on who is watching. *Child Development*, 67, 957-973. doi:10.2307/113187

Enhancing Thinking and Learning Skills in Indian Adolescents

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Abstract

Life skills are an important aspect of every individual's life. These skills can be modified at every stage of one's life. Incorporating these skills is crucial for adolescents, as they are undergoing major changes in their personal life. The present study was based on a sample size of 100 participants, who were in the age range of late adolescence (17yrs-19yrs). The objective of the study was to focus on the thinking & learning skills of participants who were in the late adolescence, as this is the stage where the society expects them to take more independent decisions & the adolescents themselves want to exercise more autonomy. For investigating this, a repeated measure design has been used whereby all the participants were assessed for three life skills- problem solving, critical thinking & creativity. The tools used to assess these were: Critical thinking in everyday life (Mincemoyer, C., Perkins, D. F., & Munyua, C., 2001), solving problems (Barkman, S. & Machtmes, K., 2002) and Creativity questionnaire-revised (Dr. V.K. Kumar & Dr. E.R. Holman (1997). The correlation analysis was done to assess the relationship between the three life skills; and their significance was tested with a two-tailed test, with $df=99$. The results obtained indicate that problem solving was significantly and positively correlated with creativity ($p<0.02$) and with critical thinking also ($p<0.01$). Further, creativity and critical thinking are also significantly and positively correlated ($p<0.01$) Hence, it can be concluded that problem solving, creativity and critical thinking are related to each other and life skills training can enhance these skills together.

Keywords

Problem solving, creativity, critical thinking, life skills, late adolescents

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Introduction

‘Life skills’ are defined as “psychosocial abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life” by the World Health Organization (1997). Life skills help in maintaining a mental state of well-being and adapting to the external environment while in interactions with others. The core set of skills include empathy, self-awareness, decision making, creative thinking, etc.

According to Robert E. Franken creativity is defined as “the tendency to generate or recognize ideas, alternatives, or possibilities that may be useful in solving problems, communicating with others, and entertaining ourselves and others. It is a life skill that differentiates one from another since everyone thinks differently. An idea, an alternative or a possibility is said to be creative when it is original i.e. unique and has a low probability, useful i.e. valuable and can help solve problems.

In ‘The Oxford Handbook of Cognitive Psychology’, Richard E. Mayer states, “Problem solving refers to cognitive processing directed at achieving a goal when the problem solver does not initially know a solution method. A problem exists when someone has a goal but does not know how to achieve it. Problems can be classified as routine or non-routine, and as well-defined or ill defined. The major cognitive processes in problem solving are representing, planning, executing, and monitoring. The major kinds of knowledge required for problem solving are facts, concepts, procedures, strategies, and beliefs.”

According to Barry K. Beyer, critical thinking means “making clear, reasoned judgments. During the process of critical thinking, ideas should be reasoned, well thought out, and judged.” It involves critically analyzing the situation before coming up with an idea or a solution. Hasty decisions are not critically analyzed since it requires time and effort to interpret the advantages, inconveniences of the subject matter etc.

Review of Literature

A research conducted by Paul Giannakopoulos and Sheryl Buckley analyses the role of problem solving, creativity and critical thinking in knowledge management from a mathematical perspective. They have hypothesized that mathematics contributes to the development of these three skills. It was concluded that mathematics by its nature, develops and enhances higher order thinking skills and thus improves the creation of knowledge

in an organization. In relation to psycho-pragmatic perspective, it leads to better management of knowledge in an organization since the approach is grounded on sound psychological theories of knowledge acquisition and application of such knowledge in an effective way which leads to a competitive advantage.

A research conducted by Dr. Fotis Kousoulas and Dr. Georgia Mega analyses creative and critical thinking in the context of problem finding (PF) and problem solving (PS) among primary school children. The sample space was 153 6th grader students (75 boys, 78 girls). The statistically significant correlations among the variables of creative thinking and the variables of critical thinking were very moderate, that is, around .20 and .30. Creative thinking variables have statistically significant correlations between them in PF and PS, varying between .32 and .46.

The study on Relationship between Creative Thinking and Critical Thinking Skills of Students (2016) aimed to determine the relationship between creative thinking and critical thinking skills of students. With a sample size of 174 students from Departments of Visual Arts Education, Religion & Ethics Education, Mathematics Education and Preschool Education, the results of this study by Kani Ülger test established that there is a significant positive correlation between creative and critical thinking skills of students in the low level. It was also found that there is an interesting interaction between critical thinking and creativity in the process of problem solving.

Uus Toharudin from the University of Pasudan described the importance of critical thinking skills and problem-solving ability in educational psychology courses to train student teachers in solving complex problems of education. This study aimed to describe the ability of critical thinking and problem-solving ability of these students. Based on the results it could be concluded that the ability of critical thinking and problem-solving ability of students still have to be improved in the future.

Study on Problem based-learning: creative thinking skills, problem-solving skills and learning outcome of 7th grade students by Anna Jarrotul Khoiriyah and Husamah showed that, creative thinking skills and problem-solving skills are among the competencies that must be possessed by students in the 21-century, which need to be developed through the learning process. This study conducted in Indonesia aimed to improve creative thinking skills, problem-solving skills, and learning outcomes of seventh-grade students by problem-based learning (PBL). It was then concluded with the help of the results obtained that teachers can implement

PBL to improve student's creative thinking skills, problem-solving skills, and learning outcomes.

A Study on Creativity and Problem-Solving Ability among Higher Secondary School Students: M. Suresh in his study emphasized the importance of developing creative and problem-solving skills in students who are the future citizens of a country. His research included a sample size of 160 higher secondary students in a private or a government school. The results of the study which was published in the year 2016 indicate that the level of creativity and problem-solving ability among higher secondary students is average. There is significant positive relationship between creativity and problem-solving ability and there is no significant difference in the level of creativity or problem-solving ability between male and female higher secondary school students.

Aim of the study: Problem solving, creativity and critical thinking are related to each other in Indian adolescents.

Null Hypothesis 1: There is no relation between problem solving and creativity in Indian adolescents.

Null Hypothesis 2: There is no relation between problem solving and critical thinking in Indian adolescents.

Null Hypothesis 3: There is no relation between creativity and critical thinking in Indian adolescents.

Alternative Hypothesis (H1): There is a relation between problem solving and creativity in Indian adolescents.

Alternative Hypothesis (H2): There is a relation between problem solving and critical thinking in Indian adolescents.

Alternative Hypothesis (H3): There is a relation between creativity and critical thinking in Indian adolescents.

Variables

Problem solving, creativity and critical thinking.

Methodology

Sample- Convenient sampling and snow-ball sampling has been used to conduct this study of 100 Indian adolescents. The age range of these adolescents is 17 to 19 years.

Tools:

1. Solving Problems developed by Barkman S. & Machtmes K. (2002) consists of 24 questions, each rated on a five-point scale from 'never' to 'often'. This scale assesses youth's problem-solving ability by examining the frequency of use of the skills needed to engage in problem-solving. A correlation of at least .80 is suggested for at least one type of reliability.
2. Creativity Questionnaire- Revised by V.K. Kumar (1997) is a five-point scale from 'strongly agree' to 'strongly disagree'. It consists of three sub-divisions: measure of creative capacity (reliability .76), use of unique techniques (reliability .81) and final product orientation (reliability .45).
3. Critical Thinking developed by Mincemoyer, C., Perkins, D. F., & Munyua, C. (2001) consists of 20 questions, each rated on a five-point scale from 'never' to 'always'. A correlation of at least .80 is suggested for at least one type of reliability as evidence.

Procedure

An online survey via Google forms was administered in which the three tests were used to collect the primary data.

Results and discussion:

Table 1: Mean, SD, Level and r values for Problem Solving, Creativity and Critical Thinking (N=100).

VARIABLES	MEAN	STD. DEVI- ATION	LEVEL	R VALUE
PROBLEM- SOLVING	71.52	7.25	High	Creativity:
				Critical Think- ing: $r = p < 0.01$
CREATIVITY	68.63	6.09	Moderately high	
CRITICAL THINKING	71.27	8.16	High	Creativity: $r = p < 0.01$

The problem-solving skills of the participants is at a High level with a Mean of 71.52. Similarly, Critical Thinking skills is also at a High level with a Mean of 71.27. Creativity resulted moderately high in participants with an average score of 68.63. Since the level of Problem-solving is high, levels of Creativity and Critical Thinking also resulted in high levels, and thus they are all positively correlated.

Figure 1:

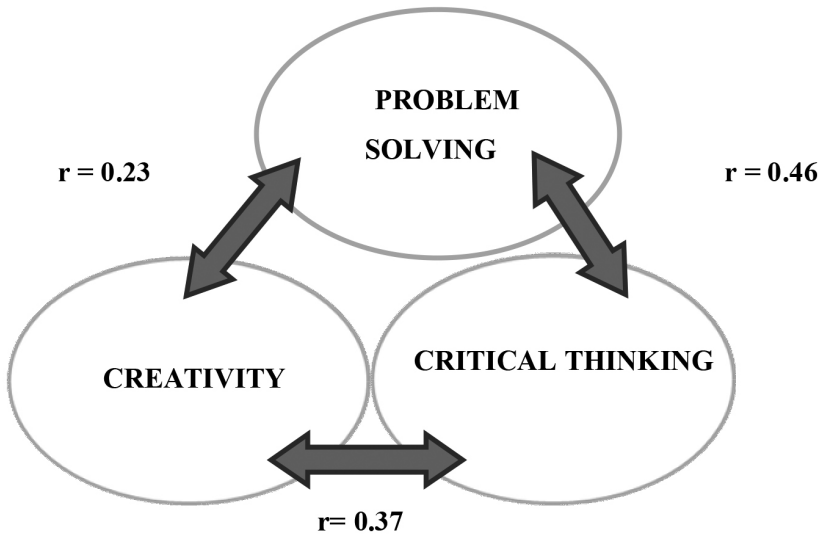
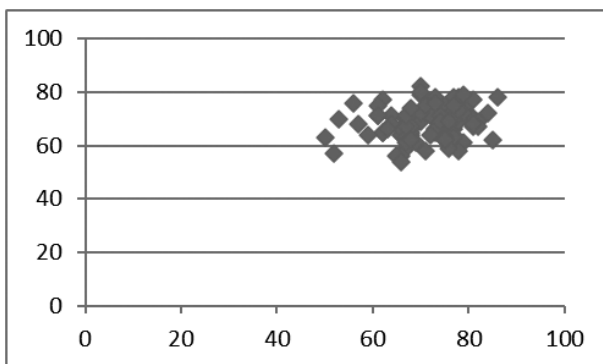


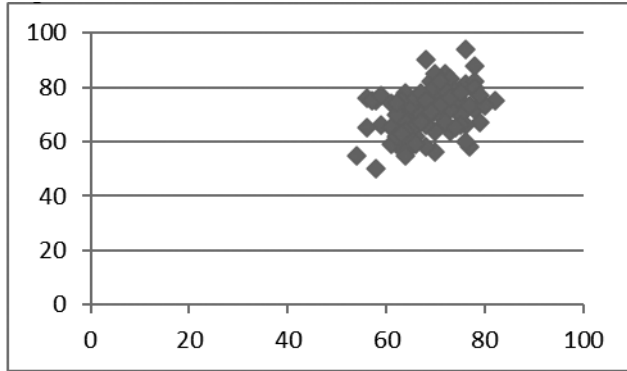
Figure 1: Correlation between problem solving and creativity is $r = 0.23$ ($p < 0.02$). Correlation between problem solving and critical thinking is $r = 0.46$ ($p < 0.01$). Correlation between creativity and critical thinking is $r = 0.37$ ($p < 0.01$).

Figure 2:



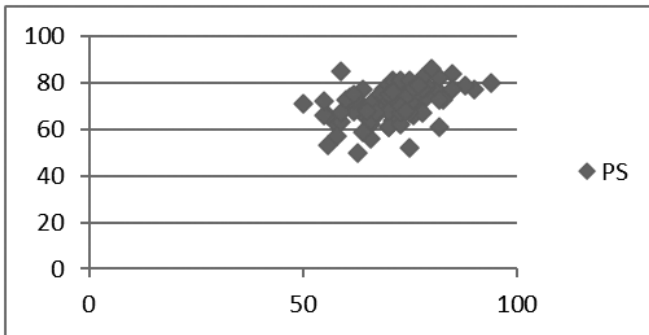
The scatterplot shows linearity; as one variable increases, the other variable will also increase since the correlation between problem solving and creativity is positive and significant.

Figure 3:



The scatterplot shows linearity; as one variable increases, the other variable will also increase since the correlation between creativity and critical thinking is positive and significant.

Figure 4:



The scatterplot shows linearity; as one variable increases, the other variable will also increase since the correlation between problem solving and critical thinking is positive and significant.

Conclusion

The study conducted shows that H1, H2 and H3 are accepted. There is a positive correlation between Problem Solving, Creativity and Critical Thinking skills among Indian Adolescents. Thus, if a person scores high on Problem Solving skills, he will also score high in Creativity and Critical thinking skills. Additionally, if a person scores high on Critical Thinking skills, he will also score high in Creativity and Problem-Solving skills. Also, if a person scores high on Creativity, he will also score high in Critical Thinking and Problem-Solving skills. The results also show that level

of Problem Solving and Critical Thinking skills are high and that of Creativity is moderately high. This is in line with H1, H2 and H3. Hence, all the three variables are interrelated to each other.

This means that if you wish to develop one skill, other skills should be developed too. In other words, if you want to inculcate Problem Solving skills in an adolescent, Creativity and Critical Thinking skills should also be focused on that adolescent.

As life skills are important to inculcate in one's life, they can be best developed during adolescence. So, as the research suggests developing one skill can benefit an adolescent by an inculcation of higher levels of other skills as well.

Limitations

- This research is restricted only to 100 participants between the age group of 17-19 years.
- This research is only done on Indian adolescents.
- The participants may not have been completely honest.
- Lack of previous studies in the research area.
- Implementation of data collection method.

Practical Relevance

- If you improve one of these skills, there will be an improvement in the other two skills as well, since they're all interrelated.
- An increase in problem solving skills of an individual will also result in an increase in Critical Thinking skills.
- An increase in problem solving skills of an individual will also result in an increase in Creativity skills.
- An increase in Creativity skills of an individual will also result in an increase in Critical Thinking skills.

References

Creative and Critical Thinking in the Context of Problem Finding and Problem Solving: A Research among Students in Primary School. (2007, January 1). Retrieved from https://www.researchgate.net/publication/242264293_Creative_and_Critical_Thinking_in_the_Context_of_Problem_Finding_and_Problem_Solving_A_Research_Among_Students_in_Primary_School

- Critical Thinking and Problem Solving Skills: How these Skills are needed in Educational Psychology? (2017, March 1). Retrieved from https://www.researchgate.net/publication/315709079_Critical_Thinking_and_Problem_Solving_Skills_How_these_Skills_are_needed_in_Educational_Psychology Retrieved from <https://ujcontent.uj.ac.za/vital/access/services/Download/uj:6218/CONTENT1>
- Giannakopoulos, P., & Buckley, S. (2009). Do problem solving, critical thinking and creativity play a role in knowledge management? A theoretical mathematics perspective.
- Khoiriyah, A. J. (2018). Problem-Based Learning: Creative Thinking Skills, Problem-Solving skills, and Learning Outcome of Seventh Grade Students. *Jpbi (Jurnal Pendidikan Biologi Indonesia) Indonesian Journal of Biology Education*. https://www.researchgate.net/publication/326279497_Problem-based_learning_Creative_thinking_skills_problem-solving_skills_and_learning_outcome_of_seventh_grade_students.
- Kousoulas, Fotis, and Georgia Mega. (2007) "Creative and Critical Thinking in the Context of Problem Finding and Problem Solving: A Research Among Students in Primary School." https://www.researchgate.net/publication/242264293_Creative_and_Critical_Thinking_in_the_Context_of_Problem_Finding_and_Problem_Solving_A_Research_Among_Students_in_Primary_School
- M. S. (2016). A Study on Creativity and Problem Solving Ability Among Higher Secondary School Students. *Indian Journal of Research*. Volume 5 (Issue 1), 294-296. https://www.worldwidejournals.com/paripex/recent_issues_pdf/2016/January/January_2016_1453367695__95.pdf
- Problem-based learning: Creative thinking skills, problem-solving skills, and learning outcome of seventh grade students. (2018, July 9). Retrieved from https://www.researchgate.net/publication/326279497_Problem-based_learning_Creative_thinking_skills_problemsolving_skills_and_learning_outcome_of_seventh_grade_students
- Toharudin, U. (2017). Critical Thinking and Problem Solving Skills: How these Skills are needed in Educational Psychology. *International Journal of Science and Research (IJSR)*. https://www.researchgate.net/publication/315709079_Critical_Thinking_and_Problem_Solving_Skills_How_these_Skills_are_needed_in_Educational_Psychology
- ÜLGER, K. (2016). The Relationship between Creative Thinking and Critical Thinking Skills of Students. *Hacettepe University Journal of Education*, 1-1. doi:10.16986/huje.2016018493

Psychological Well-being, Academic Achievement and Life Skills of Adolescents of Suburban Mumbai

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Abstract

Life skills are the essential component of life in our modern times as every individual has to deal with the complex challenges of day to day living. Adolescents need a variety of psychosocial skills to thrive in the globalized digital world. Refined social skills are needed to build up constructive relationships within the organizations. Developing thinking skills enables one to solve numerous complex dilemmas that are encountered in day to day dealings. Coping skills empower individuals to resiliently face the challenges of life. Individuals equipped with these skills are not only an asset to society but a productive entity for the growth of the country. Schools must make every effort to equip students with the maximum skills to deal effectively. But the ground reality in Indian schools presents a different picture. The goal of schooling is perceived to be getting high grades, ultimately leading to happiness and success in life. With an undue focus on academic achievement, the learning of these essential psychosocial skills is often sidelined. This leads to students who score high academically, but are not deemed employable in the world of work, and lack the skills to manage themselves, falling prey to mental health issues. Hence, empirical evidence is needed to investigate the link between academic achievement, life skills and psychological well-being of adolescents. The objective of this study is to explore the relationship between academic achievement, life skills and psychological well-being of adolescents. The sample of the study was 120 students (M = 55 , F = 65) of standard VIII. The Stirling Children's Wellbeing Scale was used to measure psychological well-being; Life Skills Assessment Scale (Nair, et al 2010) was used to measure life skills. The test scores of the students were used for academic achievement. Descriptive and inferential statistical analysis was carried out. Pearson's coefficient was used for inferential analysis. The findings and implications are discussed.

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Keywords

Emotional regulation, peer relationship, assertiveness

Introduction

Adolescence is a period of self discovery due to physiological, psychological and emotional changes. It is a phase posing challenges and opportunities for adolescents themselves, Due to tremendous stress, adolescents often struggle to maintain relationships and enjoy life. If adolescents do not receive adequate training for their life issues, they can be lead astray. It is a major concern for their families, educators, professionals and other concerned members of society. Every nation must primarily work towards promoting adolescents' health. So, the schools must help students come out of this state of stress. Developing a sense of responsibility and encouraging them with healthy choices will reaffirm their psychological development and nurture their academic progress. According to UNICEF, life skills education causes a change in behavior to keep a balance of knowledge, attitude and skills. Learning to negotiate with the psychological and social demands of the society, the adolescent matures into adulthood.

Life skills can be integrated through the learning process of students which includes the transmission of knowledge, attitude, values and skills. Life skills become a necessity for people to possess to adjust themselves skillfully while dealing with emotional difficulties. Life skills can help adolescents to adopt their decisions wisely, communicate effectively, relate efficiently, manage emotions and mental stresses and live a healthy and better life. With the promotion of life skills training among adolescents, the level of psychological well being improves. Life skills are thought to be mental health promotion – preventive measures that have been started by World Health Organization (World Health Report, 2007). Training in life skills prepares students educationally as well as helps them to face adjustment problems in society.

Academic years of individuals are the most important and valuable time of life. Since education is the process of all round development of a student, schools act as agents to provide ample opportunities in the teaching process to create interest among students. Interactive learning in classrooms will improve the quality of education. Quality of learning is the basis of carving behind the unfolding human civilization through the ages immemorial (Mukhopadhaya, 2002). One such factor of quality learning is through life skills in students. These life skills help to face challenges of everyday life with a positive attitude and fulfill goals and ambitions to lead a life with

full potential. Thus, life skills can enable individuals to interact with others so that they can live their lives meaningfully in society.

Adolescence is a transition phase of growth and development between childhood and adulthood. It is a period of life with specific health and developmental needs and rights. It is time to develop knowledge and skills, learn to manage emotions and relationships, and acquire attributes and abilities which are important to enjoy life and assume adult roles. The World Health Organization defines an adolescent as any person between ages 10 and 19 and is sometimes referred to as a teenager.

World Health Organization defines Life skills as ‘abilities for adaptive and positive behaviour which enables individuals to deal effectively with the demands and challenges of everyday life’. Life skills represent the psycho-social skill that help in coping emotions and stress, improve interpersonal skills and increase the ability of critical and creative thinking.

Psychological well being is an important constituent of a healthy person. It is a positive feeling that includes enjoyment, contentment, satisfaction and happiness. The components of well being as life satisfaction shows evaluation of individuals’ lives both of the past and the present (Pavot & Diener, 2008).

Academic Achievement refers to what the student has learned or what skills the student has acquired and is usually measured through standardized tests, performance assessments and portfolio assessments (Santrock, 2006). It refers to the development of knowledge gained and skills attained in different subjects at the end of that learning period which is assessed through a criterion adopted by the educational authorities.

Review of Literature

K.R. Balasundari, Dr. A E. W. Benjamin (2011) conducted a study to examine the correlation between life skills and academic achievement of the High school students from Karaikudi region. The findings showed a significant correlation between life skills and academic achievement. Mostafa. S. & Bookani F. K. (2013) in his study on ‘The Efficacy of Training Life skills on Educational Achievement and Social Acceptance’ investigated the relationship between learning life skills and academic achievement of the students of the Middle School of Iran comprising of 619 students in each group. The findings suggested that life skills training helped to improve learning among students when there is high level of self awareness among students. Joseph (2014) investigated the effects of life skills train-

ing on the enhancement of emotional intelligence of students of standard IX. The results revealed a significant effect in the improvement of emotional intelligence, self esteem, self confidence and self efficacy among the students. Elisabetta Sagone, Maria Elvira De Caroli, Maria Luisa Indiana, Salvatore Luciano Orazio Fichera (2017) conducted a study in which 49 Italian pre-adolescents (26 boys and 23 girls) were selected randomly from Sicily, Italy. The study consisted of exploratory analysis of life skills, psychological well being and body esteem levels by using the Comprehensive Inventory of Thriving –CIT (Andolfi et al., 2017), the Perceived Self-efficacy Scales in life skills (Sagone& Indiana, 2017), and the Body Esteem Scale (Confalonieri et al., 2008). The findings concluded that those who perceived themselves as efficient in life skills and possessed the ability to manage their emotions well, manifested high level of psychological well being.

The review of literature concludes that there is a positive relationship between the three variables i.e., life Skills, psychological well being and academic achievement. As per studies so far known, there has been no study conducted in the Indian context with these three variables at one time. The present paper is a brief attempt to find out whether there is a correlation between the three variables particularly with respect to gender.

Research Question

What is the relationship between life skills, psychological well-being and academic achievement in adolescents?

Objectives of the study

1. To explore the correlation between the three independent variables, life skills, psychological well being and academic achievement of the students of secondary section of suburban Mumbai.
2. To investigate the life skills and psychological wellbeing of secondary school students.

Hypothesis of the Study

1. There is no significant difference between the life skills of secondary school students with respect to gender.
2. There is no significant difference between the psychological well-being of secondary school students with respect to gender.

Sample of the Study

The random sampling method was used in the present research. One of the schools from the western suburbs was selected by lottery method and 120 students from standard eighth comprised the sample study ($N= 120$, $M = 55$, $F = 65$).

Methodology of the Study

The descriptive correlation method is used to discover the correlation between the three independent variables. The information is collected without any interference or influence on the variables in study. Life skills of the students of standard eighth were assessed by using the Life Skills Assessment Scale (Nair et. al., 2010). Psychological well being score were collected by using Stirling Children's wellbeing scale. The academic progress scores of the students of standard eighth were collected from the aggregate marks of the previous academic year i.e., 2018- 2019.

Variables

Independent variables engaged in the study were life skills, psychological well being and academic achievement.

Tools of data collection

To measure life skills, Life skills Assessment Scale (Nair, et al. 2010) consisting of 100 questions were used to assess on a 5- point Likert scale. This scale had high reliability value which showed Cronbach's Alpha coefficient of 0.84, split-half indicated 0.82 and test-retest indicated a score of 0.91. Stirling Children's wellbeing Scale was used for the Psychological Well being scores in which 12 plus 3 questions were to be answered on a 5- point Likert scale. The scale has good internal reliability showing Cronbach's Alpha exceeding the 0.8 benchmark and good external reliability showing Pearson's Correlation exceeding the $r = 0.7$ benchmark. It is suitable for educationists measuring the effectiveness of interventions with children between 8 to 15 years of age. For the academic achievement scores, the investigator collected the aggregate of the academic scores of the previous academic year 2018 - 2019 of the students of present standard eighth.

Limitations of the study

The study was conducted with the students of standard eighth of only one Suburban school in Mumbai.

Analysis and Discussion

Table No. 1

Pearson Correlation Coefficient scale

Sl.No.	Correlation Coefficient of students (120)	Scores
1	Correlation Coefficient between LS & PW	0.214692
2	Correlation Coefficient between LS & AA	0.147226
3	Correlation Coefficient between PW & AA	0.071191

The analysis of the Pearson's Coefficient Correlation scores in Table No. 1, suggests that there is a small positive correlation between Life Skills and Psychological Well being as it shows 0.21 and there is also a small positive correlation between Life Skills and Academic Achievement as it shows 0.14. In the case of correlation between Psychological Well being and Academic Achievement, there is a very small positive relationship.

Table No. 2

Independent Samples t-test of Life Skills and Psychological Well being

Group	N	Mean	SD	Df	t
Girls	65	(LS) 66.47	5.576	111.02	-0.16
Boys	55	(LS) 66.64	6.060		
Girls	65	(PW) 73.09	10.91	112.58	0.33
Boys	55	(PW) 72.41	11.49		

Table No. 2 reveals that the difference in Life Skills scores between Girls (N= 65 , M = 66.47, SD = 5.576) and Boys (N = 55, M = 66.64 , SD = 6.060) was not significant , t (111.02) = - 0.16, p > 0.05. Since the calculated t-value is less than table value 1.96 at 0.05 level, the hypothesis No. 1 is accepted.

Table No.2 also reveals that the difference in Psychological Well being scores between Girls (N= 65 , M = 73.09, SD = 10.91) and Boys (N = 55, M = 72.41, SD = 11.49) was not significant , t (112.58) = 0.33, p > 0.05. Hence the hypothesis No.2 is accepted.

Hence based on the above results, it is observed as follows:

1. There is no significant difference between life skills of girls and boys of the secondary section of suburban Mumbai.
2. There is no significant difference between psychological well be-

ing of girls and boys of the secondary section of suburban Mumbai.

Findings and Discussion

From the above results of the study, it can be concluded that there is no significant difference between the life skills of females and males and between the psychological well being of females and males. Since the study indicates a small increase in the coefficient level of life skills and academic achievement, it means that when both females and males are exposed to life skills there might be an increase in their academic performance. This finding is supported by the results of Savoli, Ganji and Ahmad Zade (2010) who claimed that there is a significant improvement in the academic achievement of both males and females after life skills training. The findings show a small increase in the coefficient level of life skills and psychological well being, which can improve positively after the intervention of life skills training as suggested by a study conducted by S. K. Vijendra kumar, Krishnamurthy A. R., their findings proved that both males and females exposed to life skills training showed improved psychological test scores. With regards to psychological well being and academic achievements, the coefficient scores have shown a very small positive relationship. It may be due to life skills training or any other factor which needs to be studied in the future.

Limitations:

The study was confined to only Secondary School of Maharashtra State Board of Education from Mumbai Suburbs.

Conclusion

Training in life skills can bring about a change in both males and females ways of dealing with normal life issues. Since adolescence is a period of building attitude, acquiring knowledge and learning skills, educational policies can have appropriate strategies to supplement the school curriculum with effective life skills training program. Inclusion of life skills training in the school curriculum can be very beneficial to the growth of adolescents to transform their behavior and live a healthy and happy life.

References

- Elisabetta Sagone , Maria Elvira De Caroli, Maria Luisa Indiana, Salvatore Luciano OrazioFichera (2017) - Psychological Well-being and Self-Efficacy in life skills among Italian Pre-adolescents with Positive Body Esteem: Preliminary results of an Intervention Project - Psychology, Volume 9, Issue 6 (June 2018).<https://www.scirp.org/journal/PaperInforCitation.aspx?PaperID=85711>

- Joseph A., (2014) -The Effects Life Skills Training on the Emotional Intelligence of Adolescents. Proceeding of 5th International Conference on Life Skill Education. New Delhi: Excel India Publisher, 197-200. <http://dx.doi.org/10.21172/ijjet.103.02>
- KR.Balasundari, K., & Benjamin, D. A. (2011). Correlation of Life Skills and Academic Achievement of High School Students. *Indian Journal of Applied Research*, 4(4), 147-148. doi:10.15373/2249555x/apr2014/44
- Kumar, V. S., & Krishnamurthy, A. R. (2016). The impact of life skills training on psychological well-being: The role of gender differences. *Indian Journal of Health and Wellbeing*, 7(2), 193.
- Mostafa, &Bookani. (2013). The efficacy of training life skills on educational achievement and social acceptance. Retrieved from <http://mzuir.inflibnet.ac.in:8080/jspui/bitstream/123456789/747/1/WANKMENLANG%20KHARBULI%2C%20SW.pdf>
- Savoji, Azar &Ganji, Kamran &Ahmadzade, Mahmood. (2010). Effect of Life Skills Training on Motivating Progress and Students' Academic achievement. *Scientific Journal of Social Welfare* (47).

Introducing Life Skills to Early Adolescents through Storytelling

Mr. Nagendra R*

Abstract

According to WHO (1997), life skills can be defined as the abilities for adaptive and positive behavior that would enable an individual to deal with the demands and challenges of everyday life effectively. Life skills help an individual in assessing themselves and find their strengths and weaknesses and thereby start implementing steps through which they can overcome the different obstacles in life. To be trained in different life skills benefits the individuals by increasing their competency among their fellow adolescents and help in changing behavior and attitude. The target of the study is the early adolescent rural population. Out of the total population of India more than half resides in the rural areas. The rural areas of India are deprived of the vast majority of opportunities that are available to the rest of the population. As a result, it is important to introduce Life Skills to the adolescents in the rural areas. The focus of the program is on early adolescents falling in the age group of 10-13 years as they are the future of a particular demography. Storytelling is explored as a method for introducing life skills. The study is predominantly qualitative in nature. The sample consists of 35 participants belonging to the early adolescent age group within which 20 are male and 15 are female. The findings show that storytelling is an effective way to introduce life skills to early adolescents in the rural area.

Keywords

Life skills, rural early adolescents, storytelling

Introduction

Life Skills can be defined as the ability for adaptive and positive behavior that would enable an individual to deal with the demands and challenges of everyday life effectively. The above said definition was coined by the World Health Organisation (WHO). Life Skills cannot be achieved by an individual just by attending a single class or lecture. As the name sug-

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gests these are skills that can be learnt by constant and rigorous practice and the person should have the patience also to completely comprehend it. Life Skills help an individual in accessing themselves and find about their own inner potential, their strengths and weaknesses and thereby start implementing steps through which they can overcome the different obstacles in life. To be trained in different life skills benefits the individuals by increasing their competency and help in acquiring positive behaviors and attitudes. Life skills are contextual in nature and there are different classifications in use. The WHO classification of ten core life skills is used in this study.

Life skills are crucial for all and for those deprived of resources, they assume critical importance. The rural areas of India are deprived of the vast majority of opportunities that are available to the rest of the population. One of the crucial facilities that the rural areas are deprived of is proper education. Education is necessary for the proper upbringing of an individual as it paves way to their future. Adolescents in rural areas need access to quality education, which involves knowledge of the core subjects as well as competencies for coping with challenges of life which they might face in future. As a result, it is important to introduce Life Skills to the adolescents in the rural areas. Though there is a lack of consensus on the definition of adolescents, WHO and UNICEF define adolescents as those aged 10 – 19 years (WHO, 2012, UNICEF 2005 as quoted in UNICEF, 2013). Adolescent individuals have been taken as the target as it is the phase where most of the character building and development of values takes place.

Storytelling as a method for introduction of life skills

Storytelling has been used as a method of instruction from times immemorial. Stories embody the essence of an experience and are transacted through engaging the cognition and affective domain of the learners. Stories are ways of culture transmission as well as instruments of social change. Parables originating from the indigenous culture of the learners are tools for powerful pedagogic practices. Life skills education focuses on the development of competencies for application to day-to-day life. Stories, which retell life experiences are apt for facilitation of life skills education, as the learner can easily assimilate the theoretical concepts and their integral relationship to real life application. Storytelling helps the propagation of life skills education by enabling the learners to make comparisons and draw analogies (WHO, 1993). Stories, as instructional methods, may be case-based, scenario-based, narrative-based or problem-based (Andrews, et.al. ,2009). The present study uses stories from Panchatantra as a medium

of instruction in the narrative based format. Panchatantra is a collection of animal fables, attributed to Vishnu Sharma, and written with the purpose of educating three young princes about the “wise conduct of life” These stories mostly involve animals, and were chosen as children tend to identify better with animals.

Methodology

The study used a qualitative approach to explore the effectiveness of storytelling method for life skills education. The introduction of life skills was done through five sessions, which involved using the storytelling method for introduction of the ten life skills given by WHO. The stories were supplemented by experiential activities. Analysis of individual feedback was used to explore the effectiveness of storytelling for introduction of life skills sessions for early adolescents during the process of the study. A detailed case study of two participants was carried out for in-depth analysis.

Research Questions

The research questions for the study were:

1. Is story telling an effective methodology to introduce life skills to early adolescents?
2. Does the introduction of life skills through story telling help in facilitating positive behaviors in early adolescents?

For conducting the sessions, the literature used were:

- Manual for Training in Life Skills through Story Telling, Rajiv Gandhi Institute for Youth Development.
- Facilitator’s Manual on Enhancing Life Skills, Rajiv Gandhi Institute for Youth Development.

Sample

The UNICEF report on adolescents in India (UNICEF, 2013) observes that adolescents in the age group of 10 – 14 yrs are understudied and have needs which are distinct from those in the age group of 15 – 19 years. Hence, the sample of this study was chosen to be adolescents in the age group of 10 – 14 yrs, i.e the early adolescents. Since this is the age that adolescents develop self-image and ability to solve problems, this is the critical age group for inputs on life skills (Mangrulkar et. al 2000).

A total of 35 early adolescents (M=15, F=20) participated in the program.

Implementation Process

The program was implemented in the local Government school, for students from classes 5th to 7th. The school is a Marathi medium co-ed school. Students from all the classes were combined to form one group for the sessions. The five sessions were conducted by the researcher. Since the participants experienced difficulty in understanding Hindi, a translator also helped in communicating with the participants in their mother tongue. Four stories were chosen for the study. These stories portrayed characters in various problem situations and the application of life skills to resolve the problem. Keeping in mind the age group of the participants, instead of verbal narration, you-tube videos featuring the stories were used. The stories were supplemented with experiential activities, to enable the participants to comprehend the life skills illustrated in the story. Individual participant feedback about each session was taken in written form. The facilitator observations were also recorded. Two cases were chosen for in-depth exploration of the effect of the sessions on life skills development of the participants.

Findings

The effect of storytelling method for introduction of life skills was analyzed through the examination of individual feedback given by the participants as well as facilitator's observations to the responses of the participants' in the discussion. Since the feedback was sought in written form, gender differences were observed in the manner of giving feedback. While the female participants wrote exhaustively regarding the sessions, the responses of the male participants were less wordy and at times bare minimal. The responses to a few activities were also varied. In an activity of writing personal likes and dislikes, one respondent mentioned in the write-up about his likes and dislikes, his future aspirations and about his family background. On the other extreme, another participant just mentioned his name. likes and dislikes.

After seeing each story, the participants were asked to explain their understanding of the story. It was seen that the same story elicited very different responses from the participants. Eg , regarding the story of three fish, one of the participants wrote, "a friend is a friend and they should trust them always and should also trust ourselves" whereas another participant wrote, "a person should not believe in God because our death can happen any time".

The storytelling was followed by a discussion regarding the story, which

threw light on the life skills represented in the story. It was observed that after listening to the story, the participants were able to understand the first layer of the story. However, the ensuing discussion helped them to understand the deeper meaning of the story.

As the sessions progressed the students were able to understand the different layers that each story possessed, which was seen in their writing as well. The participants could also link the stories to life skills in the later sessions. One participant wrote in the session regarding the story of ‘Suchimukh the Bird’, “every person should have good listening as well as communication skills” and another participant wrote “the bird was killed because it was not able to communicate properly”. Even though the participants were not able to write particular keywords such as critical thinking was lacking or there was lack of effective communication, they were able to use these skills to understand the layers of the story. This showed the improvement of understanding regarding life skills within the participants.

Experiential activities were used to enhance the participants understanding of life skills. It was observed that activities like “Do not wake the dragon”, Paper dance and riddles helped the participants to use and enhance social skills like effective communication and interpersonal skills as well as thinking skills like critical thinking, creative thinking, problem solving and decision making.

Case Study

Case studies were conducted as an instrument to assess the impact of the sessions on the participants.

Casework 1

Background: The age of the female participant is 12 and is studying in the 6th standard.

Synopsis: The participant is extremely shy and fails to come forward. This shyness maybe due to a new topic that has been brought in front of them or due to the language and cultural barrier that the person has with the facilitators.

Impact: The participant was shy at the beginning of the sessions. In the introductory session while the other participants were actively involved in the ice breaking activity, she was keeping to herself and not responding to the facilitators; taking a note of this the participant along with others who were being reluctant were told to come up to the stage and talk. In the sec-

ond session there was more improvement as she was actively participating in the initial discussion followed by the video screening. After reading the summary written by the participant about the video screening, it was evident that she had understood what was being taught to her. Thus, the positive behaviours observed through the course of the sessions are increase in confidence level indicated by more active participation and enhanced communication skills which were evident through her participation in the discussion.

Casework 2

Background: The male participant is of age 13 and studies in the 7th standard.

Synopsis: From the beginning of the session, the participant was actively involved in all the activities throughout the five sessions. The problem was that he was not able to comprehend the underlying life skill that was to be grasped from the video screening and the stories.

Impact: The participant was actively participating in all the events but there was the problem of not able to comprehend the lessons that were taught in the session. In the first session there was little effort put from the participant for understanding the sessions properly. As the sessions continued, he was able to understand gradually what the stories actually meant to convey showing a progress in the cognitive ability of the participant. The write up submitted by the participant after the sessions were becoming more and more relatable to the lesson that was being taught. The positive behaviors observed in this case relate to thinking skills, possibly enhanced critical thinking as well as problem solving which is evidenced by the progress in his ability to grasp the underlying meaning in the story.

Discussion

The analysis of feedback reveals that the participants were able to understand the elements of the stories and relate them to life skills. Practice of life skills in real life situations is a critical component of life skills education. The participant responses revealed that they were able to connect the animal fables to their own real-life situations. These connections may help them build the core life skill competencies for dealing with challenges of their life. WHO and UNICEF have recommended storytelling as an effective method for life skills education (WHO,1999; UNICEF,2012). The findings of this study also indicate that storytelling is effective in introduction of life skills to children.

An analysis of the case studies of the two participants showed gradual positive behaviour change, during the process of the life skills sessions. The female participant showed enhanced self confidence and communication skills. Mokhtar, Halim and Kamalruzaman (2011) also reports similar findings, where storytelling enhanced participants communication skills by enabling them to associate meanings and emotions with words. The male participant showed enhanced thinking skills as the sessions progressed. Thus, storytelling method for life skills education might be effective in enhancing thinking skills for children. Arora and Joshi (2015) also reported similar findings in their study of the effectiveness of life skills training through storytelling on the academic performance of children with attention deficit, hyperactivity and conduct disorders.

Conclusion

This study explored the use of storytelling method for introduction of life skills to early adolescents from rural areas. The minds of the early adolescents are easily distracted and as a result they may not be able to focus on the sessions if only theory is taught to them. Storytelling and screening of the stories are appropriate methods because it captures the attention of the adolescents and makes them focus on the lesson that underlies within the story. The limitation faced by the researcher was the language barrier which was due to the participants being resident Marathi speakers and did not properly understand Hindi or English, as a result the programs were conducted through the help of translators. The other major limitation was the time constraint, with the number of days and the hours allotted by the school authorities we were able to make progress but if there was more flexibility with respect to availability of time, the output would have been much more superior.

The sessions were able to make an impact on the behavior pattern of the participants some participants who were at first shy or reluctant to speak up were able to come out of their self-isolated shell and speak up about their views. The study shows that story telling is an appropriate method to inculcate life skills within early adolescents, and they were able to make some form of behavioral changes.

References:

- Andrews, D. H., Hull, T. D., & Donahue, J. A. (2009). Storytelling as an instructional method: Descriptions and research questions. Oak Ridge Inst for Science and Education Tn.
- Arora, M. S., & Joshi, U. (2015). Effectiveness of Life Skill Training through the Art of Storytelling on academic performance of Children with Attention deficit hyperac-

- tivity and conduct disorder. *Journal of Psychiatric Nursing*, 4(1), 9-12.
- Mangrulkar, L., Whitman, C. V., & Posner, M. (2001). Life skills approach to child and adolescent healthy human development. Pan American Health Organization, Division of Health Promotion and Protection, Family Health and Population Program, Adolescent Health Unit.
- Mokhtar, N. H., Halim, M. F. A., & Kamarulzaman, S. Z. S. (2011). The effectiveness of storytelling in enhancing communicative skills. *Procedia-Social and Behavioral Sciences*, 18, 163-169.
- Unicef. (2012). *Global evaluation of life skills education programmes*. New York: United Nations Children's Fund.
- World Health Organization (WHO). (1999). *Partners in Life Skills Education-Conclusions from A United Nations Inter-Agency Meeting*. Geneva: Department of Mental Health. Social Change and Mental Health Cluster, WHO.
- World Health Organization. (2003). *Skills for health: skills-based health education including life skills: an important component of a child-friendly/health-promoting school*.

Towards Nurturing Inclusion that Fosters Quality of Life and Positive Mental Health of Children with Special Needs – Perspectives from Bhutan

Sonam Choden*

Abstract

Education has been accepted as a basic human right (Jomtein 'Education for All' Conference (UN Inter-Agency Commission, 1990), the Dakar World Education Forum, (UNESCO, 2000) and the Millennium Development Goals (UN, 2000). Education is a critical element for development of individuals and nations. Inclusive education considers all children to be a part of the school community and endeavors to provide for the development of each child. This paper explores the practice of inclusive education in the school with special needs children in Bhutan. The study addresses the following research questions – How is inclusive education implemented in the schools in Bhutan? What are the perspectives of the various stakeholders to the implementation of inclusive education in Bhutan? What measures could contribute to enhancing the quality of inclusive education in Bhutan to foster quality of life and positive mental health for children with special needs in Bhutan, any expectations from the Government? The data to answer these questions were collected through qualitative methodology. Focused group discussions were used to gain knowledge about the perceptions of inclusive education among different stakeholders viz. teachers-15; parents-35; school administrators-2; students -07; yoga trainers-2, school counselor-1, librarians-2. Based on the data gathered in these focused group discussions, individual interviews were conducted. The data was analyzed and the findings were considered in the light of the existing literature in the area. Conclusions suggest that effective awareness programs, appropriate infrastructure and accessibility, human and material resources, early intervention and recreational facilities, teacher training, therapeutic professionals pertaining mindful practices and yoga for special children as crucial elements very likely to bring the quality of special education program in Bhutan. Such a study can serve as an emergent call to the concerned organizations to support and move forward timely and appropriately.

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Keywords

Emotional regulation, peer relationship, assertiveness

Introduction

In the context of the schools with Special Education Program, Inclusion means to include children with varied disabilities into the mainstream classes. Like all other children, these children also have equal rights to education. The inclusion of children with disabilities in the mainstream classes has been legalized in most of the countries, which is a way forward towards a gradual extinction of exclusion in our society and globally. Although inclusive education is a relatively new concept in Bhutan (Rinchen Dorji, 2015), the principal philosophy of inclusive education is inherent and permeates across most policy documents in Bhutan. The inclusion of students with disabilities in the general education classroom is a current legal requirement in the United States according to the nation's special education law identified as Individuals with Disabilities Education Act, or IDEA ("Sec. 300.8 Child with a Disability." n.d.)

Statement of the Problem

According to one study, in the United States, teachers agreed, "Most education teachers lack an appropriate knowledge base to educate a typically developing student effectively" (Hyunjeong, et al., 2014). The inclusion of children in the mainstream classes has always been a challenge to the teacher who takes the mainstream classes singly; and especially when the class strength exceeds 20 children besides having 2 or more children with special needs, there has always been a lack of teacher's incapability to teach the subjects. Despite this lack of education, students with special needs are still placed in the general education classrooms (Hyunjeong, et al., 2014, p. 16). Studies show that teachers do want students with special needs in their classroom; however, they do not feel prepared to fully address the educational needs of these students. Recent studies show that these children can be vulnerable to anxiety, violence and depression. Thus, the idea of incorporating interventions like mindful practices and Yoga especially designed for special children and their parents seem relevant.

Purpose of the Study

The purpose of the study was to identify the emergent needs and lapses in the field of practices, measures, facilities and interventions pertaining to schools with the Special Education Program in Bhutan; and to address mindful practices and yoga designed for special children as an early inter-

vention or interventions, which the special teacher can use on children with disabilities in relation to their positive mental health and well-being.

Review of Literature

Frank, J.L., et al. (2014) conducted the study aimed to assess the effectiveness of a universal yoga-based social-emotional wellness promotion program, Transformative Life Skills, on indicators of adolescent emotional distress, pro-social behavior, and attitudes toward violence in a high-risk sample. Participants included 49 students attending an alternative education school in an urban inner-city school district. Results indicated that students who participated in the Transformative Life Skills program demonstrated significant reductions in anxiety, depression, and global psychological distress. Significant reductions in rumination, intrusive thoughts, physical arousal, and emotional arousal were reported as well. Students exposed to Transformative Life Skills reported being significantly less likely to endorse revenge-motivation orientations in response to interpersonal transgressions and reported overall less hostility than did students in the comparison condition. No significant improvements in somatization or general affect were found. Results of this pilot study provide evidence of the potential for Transformative Life Skills to influence important student social-emotional outcomes among high-risk youth.

Garg,E, et. al., (2013) carried out a pilot study on the Effectiveness of a Manualized Yoga Intervention on Classroom Behaviors in Elementary School Children with Disabilities. A pretest-posttest research design was used for a cohort of 51 elementary students with disabilities. The GRTL program was carried out daily, for 20 minutes, in self-contained classrooms. The primary outcome measure was the GRTL© Supplemental Data Sheet, a Likert scale that measured improvements in independence, attention, transition, and self-regulation. Results indicate that the GRTL program significantly improved four key classroom behaviors when the program was implemented for 16 to 19 weeks.

Gwynette M.F, et al., (2015) had done a study on Yoga as an Intervention for Patients with Autism Spectrum Disorder: A Review of the Evidence and Future Directions on the increase in prevalence of Autism Spectrum Disorder (ASD) has led to a corresponding surge in demand for novel, effective, and safe clinical interventions. Yoga is a CAM practiced by over 20 million people in the United States, and multiple studies have investigated yoga as a possible effective treatment intervention for patients with ASD. Patients with ASD could potentially benefit from yoga either direct-

ly, through the targeting of core ASD symptoms, or indirectly through the improvement of commonly occurring co-morbid psychiatric conditions. There was an evidence of improvement in core ASD and related symptoms in patients with ASD.

Research Methodology

The study is undertaken in Bhutan, at Changangkha Middle Secondary School, a model school for Inclusion of children with all abilities, which is located in the capital city, Thimphu.

The sample group comprised of various stakeholders viz. teachers -15, parents-35, students-7, yoga-trainers-2, Librarians-2, school administrators- 2 and school counselor-1 in the school. Total number of participants selected was 64. Purposive sampling was used.

Research Questions

The study sought to answer the following:

1. How is inclusive education implemented in school with special Education Program?
2. What are the perspectives as stakeholders towards implementation of inclusive education in Bhutan?
3. What measures/interventions/facilities that could contribute to enhancing the quality of inclusive education in Bhutan to foster quality of life and positive mental health for children with special needs in Bhutan? Any expectations from the Government to bring changes?

Procedures

Interviews and questionnaire distribution: This study follows a qualitative design using interviews for the illiterate parents and the questionnaire for the literate groups.

Results

The research study followed the analysis of the interviews and the questionnaire that have been distributed and collected. Out of 35 parents, 77% were aware that their children attend the mainstream classes daily but were unhappy to report that their children do not get any support in academic learning. According to Alur (2002), “Inclusion is about minimizing exclusion and fostering participation for all students in the culture within a wider framework of support for all children in ordinary schools” (p. 19).

However, there are evidences of social inclusion such as participation in the morning assembly, attending library classes, and cultural program besides including them in the disaster plans and programs of the school. The school administrators agreed about the special education program being given the top priority in the context of our school. Similarly, out of 15 teachers, 84% of the teachers also agreed that pull-out groups attend the mainstream classes. However, there is a shortage of teacher-assistants, educational resources and field expertise/training in special education. For instance, the large class size with an additional of 2 or more children with special needs becomes very difficult to teach them separately. Ainscow (1999) viewed it as a never-ending process that depended on continuous pedagogical and organizational development within the mainstream. Inclusion encompasses curriculum flexibility, pedagogy, infrastructural changes, sensitization of parents and peers as integral components of the accommodations that schools must make. Nevertheless, 8% of the teachers agreed that there are accommodations and modification facilities in terms of question paper setting, special allotment of time and room during the examinations for children with the learning difficulty. From the 7 students, 31% of them did mention that they participate in their class programs but without the academic learning. Both the school librarians also mentioned about their weekly visit along with the class these children are attached to during the library classes.

Of the 35 parents, 56% mentioned that the special program is still growing due to the fact that a lack of trained teachers in special education against the ever-increasing numbers of special needs children annually is seen as a driving factor that deprives their children of the opportunity to learn in the general classroom. 18% of the parents said that there is no academic learning in the general class. 7% of the parents were not happy to mention about the discrimination and name-calling within the school. For instance, they said, "There will be no chair for our children to sit when they go to their general classes. "The reason may be simply because these children attend only 1-2 classes in a day. 19% of them suggested having some awareness programs in place to change the attitudes in general. One parent remarked that inclusion is a step forward to enhance and incorporate maximum activities in educational, sports, cultural programs and social activities.

The school administrators expressed that these children are included in the general class to gain social skills. The teachers, on the other hand mentioned on other perspectives; 11% did mention about the basic human rights that these children must be given equal opportunities to education.

23% of the teachers mentioned about the special program to be quite successful in our school and in our country. However, there are about 22% who said that the handling the general class with special needs children is often challenging, which gives them the reason of not being in a position to provide one-to-one attention. Out of 7 students, 57% of them were not aware of other schools with special education Program but 29% are aware of one Parent Association Group and 14% suggested to have more such schools in our country.

Out of 35 parents, 19% of them gave importance on the awareness program, in the school by the SEN team; and in the community through the social media. 18% of the parents stressed on having appropriate infrastructure with an accessibility; 15% suggested to have early and specific interventions and; 12% on having some recreational space and activities; 8% said that mindful practices, meditation and yoga could have profound benefits on their children's mental health and well-being including theirs. 10% of them said the capacity building of teachers, human and material resources are a must out of which 4% of them mentioned about the requirement of expertise. There is also a mention of 3% of need in accessibility to information and physical structures. One parent said, "There is no use of infrastructure if there is no accessibility." 2% of them were concerned about the future of their children.

The school administrators gave importance on providing an adequate training to the teachers, to have early interventions and specific interventions, appropriate facilities and assistive educational devices, Act and policy and awareness programs. Similarly, out of 15 teachers, 21% gave priority to capacity building; 12% on improved infrastructure; 10% on spacious classrooms and comfortable furniture; 9% on sensitization program; 7% each on relevant educational materials, mindful practices and yoga (as strongly recommended by the 2 yoga trainers and the school counselor); 6% each on accessibility, interventions and curriculum design; 4% on parents' education; 3% each on more of such schools, medical expertise and incentive to the family; 2% on job opportunities and 1% on proper transition policy. Out of 7 students, 32% wanted to have improved health facilities for these children, 26% were concerned about the future of the Special Education Program Graduates, 21% each on the awareness program and the insurance policy to be in place.

The Ministry of Health and Education (2003), spells out its vision on education for students with disabilities in Education Sector Strategy: Realizing Vision 2010. Their vision is as follows:

All children with disabilities and with special needs – including those with physical, mental and other types of impairment will be fully accessible to the curriculum, participation in extra-curricular activities and access to cultural, artistic, recreational and leisure activities. Inclusive education continues to resonate within Bhutanese policy documents such as the Royal Government’s Tenth Five-Year Plan (2009) and the policies of the Ministry of Education (2010).

The Royal Government of Bhutan made a special mention of the need to strengthen efforts to address the educational needs of children with disabilities in Bhutan in the 9th (2003–2008) and 10th Five-Year Plans (FYP) (2008–2013). The 11th FYP (2013–2018) emphasizes the “strengthening of special education services” (GNH Commission 2013b, p. 197). For instance, NPSEN states that every special educational need institute for children with severe disabilities shall be provided a teacher assistant, a care-giver, a counselor/psychologist, a sports instructor, and an occupational therapist (MoE 2012b).

Implications

This study is typically going to be a reference point for the school administrators, policy makers (e. g Ministry of Education) and other relevant agencies in the capacity building of teachers; to come up with plans for appropriate furniture and infrastructure with accessibility; to establish better recreational space and facilitators/therapist for interventions to take place with an immediate effect; a call for the school and the teachers in the Special Education Program to plan for the mass awareness campaigns on Inclusion (Special Education Program) both in the school and in the community. This study can provide a baseline for the teachers to talk on the appropriateness and emerging needs of interventions, which not only can have an immediate positive result on these children’s mental health but also can guarantee a long-term positive impact on creating job opportunities to this group of children (Get trained and then train others policy!). The parents of these children can be the benefactors as well from such interventions like meditations and yoga thereby enhancing the quality of their life mentally and physically. Thus, better these parents are, better will be their attitude and parenting style provided to their children, and our children in the Special Education Program.

Conclusion

Inclusion is practiced though it is still found to be in a developing stage. There is a dire need of expertise on professional ground besides the need

of appropriate infrastructure, facilities, human and material resources, accessibility, curriculum design, advocacy and interventions to nurture inclusion (Special Education Program) in Bhutan. Teachers are the key change agents in any inclusive education development. Ainscow (2005) and Forlin and Lian (2008) highlight the role of teachers as critical in the success of inclusive education. Article 24 of the United Nations Convention on the Rights of Persons with Disabilities mandates all professionals working in the disabilities area to be trained to work at all levels of education to ensure that persons with disabilities are effectively engaged to benefit from inclusion (Schulze 2010). The mention of job opportunities for the special education program graduates is also a point to be considered. It is concluded from the study that there is a positive sign from the participants especially from the parents towards having appropriate interventions for their children and themselves because of the fact that this meaningful and optimum engagement of the mind and body in unity through mindful practices and yoga is a must for a healthy living. Not only will such practices help these children but also their parents (as custodians) in a long way. So, when there is a better understanding of life among the population in the school, any prejudices or stigma against such people with disability can naturally be eliminated eventually. While inclusive education was – and still is – a primarily rights-based policy approach, some research has argued that it is both cost-effective (Metts, 2004) and increases overall educational quality (Ainscow, Booth & Dyson, 2006).

References

- Ainscow, M. (2002). *Understanding the Development of Inclusive Schools*. London, CA: Routledge.
- Ainscow, M. (2005). Developing inclusive education systems: what are the levers for change? *Journal of Educational Change*, 6(2), 109-124. doi:10.1007/s10833-005-1298-4
- Ainscow, M., Booth, T., & Dyson, A. (2006). *Improving Schools, Developing Inclusion*. doi:10.4324/9780203967157
- Alur, M. (2002). Special needs policy in India. *Education and Children with Special Needs: from segregation to inclusion*. New Delhi: Sage Publications, 51-66.
- Frank, J. L., Bose, B., & Schrobenhauser-Clonan, A. (2014). Effectiveness of a school-based yoga program on adolescent mental health, stress coping strategies, and attitudes toward violence: Findings from a high-risk sample. *Journal of applied school psychology*, 30(1), 29-49.
- Forlin, C., & Lian, M. G. J. (2008). Contemporary trends and issues in education reform for special and inclusive education in the Asia-Pacific region. In *Reform, Inclusion and Teacher Education* (pp. 25-34). Routledge.
- Garg, S., Buckley-Reen, A., Alexander, L., Chintakrindi, R., Ocampo Tan, L. V. C., &

- Patten Koenig, K. (2013). The effectiveness of a manualized yoga intervention on classroom behaviors in elementary school children with disabilities: A pilot study. *Journal of Occupational Therapy, Schools, & Early Intervention*, 6(2), 158-164.
- Gross National Happiness Commission. (2013). Eleventh Five Year Plan. Retrieved from Gross National Happiness Commission, Royal Government of Bhutan website: <http://www.gnhc.gov.bt/wp-content/uploads/2011/04/Eleventh-Five-Year-Plan.pdf>
- Gwynette, M. F., Warren, N. J., Warthen, J., Truleove, J. S., Ross, C. P., & Snook, C. A. (2015). Yoga as an intervention for patients with autism spectrum disorder: a review of the evidence and future directions. *Autism Open Access*, 5(3).
- Hyunjeong, J., Tyler-Wood, T. L., Kinnison, L., & Morrison, G. (2014). The US and South Korean Pre-K through 6 Teachers' Beliefs about Inclusion Practices in their Countries: Cross Cultural Perspectives. *Journal of the International Association of Special Education*, 15(2).
- Metts, R. (2004, November). Disability and development. In Background Paper Prepared for the Disability and Development Meeting, World Bank.
- Meeting Basic Learning Needs : A Vision for 1990s. (1990). Retrieved from The Inter-Agency Commission for the World Conference on Education for All website: <https://unesdoc.unesco.org/ark:/48223/pf0000097552>
- Ministry of Education. (2012). National policy on special educational needs (draft). Retrieved from Ministry of Education, Royal Government of Bhutan website: <https://planipolis.iiep.unesco.org/en/2012/national-policy-special-educational-needs-final-draft-6240>
- Ministry of Health and Education, Thimpu, Bhutan. (n.d.). Education sector strategy: Realizing Vision 2010. Retrieved from https://planipolis.iiep.unesco.org/sites/planipolis/files/ressources/bhutan_education_sector_strategy_vision_2020.pdf
- OHCHR United Nations Millennium Declaration. (n.d.). Retrieved from <https://www.ohchr.org/EN/ProfessionalInterest/Pages/Millennium.aspx>
- Policy and Planning Division, Ministry of Education. (2018). Annual education statistics. Retrieved from Royal Government of Bhutan website: <http://www.education.gov.bt/wp-content/downloads/publications/aes/Annual-Education-Statistics-Book-2018.pdf>
- Royal Government of Bhutan. (n.d.). Ninth five Year Plan. Retrieved from https://web.archive.org/web/20120320060614/http://www.gnhc.gov.bt/wp-content/uploads/2011/04/5yp09_main.pdf
- Royal Government of Bhutan. (n.d.). Tenth Five Year Plan 2008 - 2013. Retrieved from Gross National Happiness Commission Royal Government of Bhutan website: https://web.archive.org/web/20120320060614/http://www.gnhc.gov.bt/wp-content/uploads/2011/04/5yp09_main.pdf
- UNESCO. (2000). The Dakar framework for Action. Retrieved from UNESCO website: <https://unesdoc.unesco.org/ark:/48223/pf0000121147>

Relationship between Birth Order, Emotional Maturity and Communicative Competence

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Abstract

Alfred Adler stressed on the importance of the social environment in an individual's development. One of the most important aspects he took into consideration was an individual's birth order. This study aims to draw a relationship between an individual's birth order, their levels of emotional maturity and their respective communicative competencies. In other words, how people communicate with each other. Following the format of a case study, 8 individuals were interviewed regarding their demographic details such as age, education, location and birth order and the Communicative Competence Scale (CCS), developed by Wiemann in 1977 and Emotional Maturity Scale, developed by Singh and Bharagava were administered to the participants. 2 of the participants were of the birth order, 'oldest child', 2 were of 'middle child', 2 were of 'youngest child' and 2 of 'only child'. 2 of the samples were male and six of the samples were female. A study conducted by Curry in 2015 suggested that birth order affects people's ability to communicate as it affects their social relationships and career choices. Building on the same, this study attempts to find a relation between the different birth orders and how they impact the general way of communication among the participants and their emotional maturity.

Keywords

Birth order, communication, competency, social relationships.

Introduction

Individual Psychology, also known as Adlerian Psychology, was developed by Alfred Adler and the Society of Individual Psychology was founded by him in the year 1912. Individual Psychology focuses on the importance of an individual's personality and harmony through social interactions. Some

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of the main concepts Adler adopted were striving for superiority and overcoming feelings of inferiority, a prospective approach to attain goals in the future and the importance of social interactions (Schultz, 2012).

Adler's greatest and most impactful theory is based on his research on birth order and relationship between siblings accompanied by feelings of superiority and inferiority. Birth order refers to the position of an individual in the sibling constellation (Mathew & Joy, 2018). The four main birth orders proposed by Adler are first born, middle born, last born and only born or twins. He stated the importance of the impact that birth order could have on an individual's life (Leman, 2009). This chronological position frames a person's personality and determines their unique characteristics (Mathew & Joy, 2018).

Emotional maturity is the capability of adolescents and young adults to regulate emotions and enable them to adjust their emotional progression, autonomy, social adjustment and integration of different components of their personality (Mathew & Joy, 2018). Emotional maturity includes striving for emotional health (Shimsiya&Parambat, 2016). As stated by Meninger in 1999, emotional well-being is the major determinant of personality. Several studies find a relationship between emotional maturity and birth order (Saroglou&Fiasse, 2003; Aminbhavi&Pastey, 2006; Mathew & Joy, 2018). The common factor that connects them could be their impact on the integration of personality. Various characteristics that define each birth order can influence the development of emotional maturity. Thawani conducted a study in 2015 and concluded that gender differences were observed between emotional maturity based on birth orders.

Communicative competence is a term coined by Hymes in 1966. This notion was borrowed from Noam Chomsky's (1965) idea of "linguistic competence". It is defined as an innate knowledge of the function and principles of language use. The four components of communicative competence are linguistic, sociolinguistic, discourse, and strategic competence. Linguistic competence deals with grammar and vocabulary, sociolinguistic competence stresses on the sociocultural rules of language, discourse specifies the knowledge of how to produce and comprehend oral or written texts in the modes of speaking/writing and listening/reading respectively and strategic competence refers to recognition and correction of breakdowns in the use of language.

This study aims to determine a relationship between birth order, emotional maturity and communicative competence. The characteristics of different

birth orders are assessed to determine the correlation with emotional maturity and communicative competence.

Review of Literature

This study examines a relationship between birth order, emotional maturity and communicative competence among young adults. Various studies have been conducted to study relevant topics. In the study conducted by Joy & Mathew examined the impact of birth order on emotional maturity and general well-being of adolescents. This study suggests a significant increase in emotional maturity and general well-being among single born, first born and last-born adolescents (2018). Another similar study conducted by Fullerton, Ursano, Wetzler&Slusarcick in 1989 on birth order, psychological well-being, and social supports in young adults suggested that first born males had greater negative feelings, whereas last born males had a high level of psychological well-being.

College students belong to an age group where major changes occur in their lifestyle and this can have an impact on their emotional maturity. Results of a normative survey study concluded that college students have extremely unstable emotional maturity (Subbarayan& Visvanathan, 2011). Another study, in contrast, conducted on 160 female post-graduate students of the Yasouj city, suggested that a high positive correlation between emotional maturity and overall adjustment (Mahmoudi, 2012). A final study was carried out to check adjustment and emotional maturity among college students (Sharma, 2012). It was conducted on female undergraduates. They were assessed on Adjustment Inventory for College Students (Sinha and Singh, 1995) and Emotional Maturity Scale (Bhargava and Singh,1991). Results indicated that the first-year undergraduate students had to face greater difficulties regarding social adjustment and their emotional maturity was much less compared to the final students.

As emotional maturity and communicative competence fall under the broad dimensions of personality, researchers have studied how birth order can have an impact on personality over years. Saroglou and Fiasse attempted to study birth order, personality, and religion: a study among young adults from a three-sibling family conducted in 2003. 122 young adults had completed the NEO-PI-R and reported their religious and school information. Middle borns reported to be low in conscientiousness and last borns were seen to be warm and agreeable. Another study that attempted to understand birth order and personality was conducted and compared in an analytical method using two strategies such as by comparing siblings

with different birth-order positions, within the same family (within-group design) and between different families (between-group design). There was an effect of birth order on intelligence and personality. (Julia M. Rohrer , Boris Egloff , and Stefan C. Schmukle, 2015).

A study suggested that a firstborn is about 13 percent more likely than second born sibling to be admitted to one of the top colleges. This study applied Darwinian principles to determine sibling achievements (Sulloway, 2010). Volling, McElwain and Miller, in 2002, studied the jealousy complex between young siblings and concluded that younger siblings' jealous affect with mothers was linked to the child's temperament, whereas older siblings' jealous affect with mothers was related to the child's emotional understanding. Kennedy and Karmer (2008) analyzed the role of emotion regulation (ER) in improving sibling relationship quality (SRQ) by evaluating the 'More Fun with Sisters and Brothers Program'. Higher levels of ER were linked with more positive SRQ at posttest.

Ginsberg conducted a study in 1998 to examine the relationship of birth order and socioeconomic status to children's language experience and language development. First borns had greater grammatical development and later borns had better conversational skills. A more specific study was conducted to determine a relation between birth order and communication skills of pharmacy students (Murawski, 1995). It concluded that birth order influences communicative styles, with interpersonal rigidity as the theme.

Since there are limited researches on how birth order draws a relation between communicative competencies, this study aims to determine a relationship between the above and expand on the relationship between birth order and emotional maturity.

Methodology

This study aims to draw a relationship between birth order, emotional maturity and communicative competence.

Design

The current study followed a case study format. Data were collected through face-to-face interview and paper-pen standardized questionnaires. The demographic details of the subject were questioned following their opinions and subjective perceptions of their birth order. The 'Emotional Maturity' questionnaire and 'Communicative Competence' questionnaire were administered to the subjects following the interview.

Variables

The first variable in the study is birth order. Birth order is defined as the position of an individual in the sibling constellation (Mathew & Joy, 2018).

The other variables of the study are emotional maturity and communicative competence. Emotional maturity can be defined as the capability to manage emotions and emotional progression, autonomy, social adjustment and integration of different components of personality by adolescents and young adults (Mathew & Joy, 2018).

Communicative competence is said to be comprised of knowledge and capacity for use of this knowledge in communication within social settings (Bachman, 1990). The different components of communicative competence are general competence, empathy, behavioral flexibility, social relaxation and interaction management.

Sample

The sampling technique used was purposive in nature with convenient sampling. The physical environment in which the data were collected was similar for all the participants. The participants belonged to the ages between 19 to 23 years. Data was collected through an interview method in the form of a case study.

Inclusion Criteria

Participants were selected based on their respective birth orders - oldest child, middle child, youngest child and only child.

Exclusion Criteria

Participants below the age of 19 and above the age of 23 were excluded from the study. If the participant had a twin sibling, they were then excluded from the study.

Tools Used

Interview

The interview comprised of questions relating to the specific birth orders. Two questionnaires were administered to the subjects, namely, 'The Emotional Maturity Scale' developed by Dr. Yashwir Singh & Dr. Mahesh Bhargave and 'The Communicative Competence Scale' by Wiemann. A semi-structured interview method was employed.

Procedure

The participants were asked to be present at the location of the interview. The interview room was set up with water and biscuits for the comfort of the participant. The interviews lasted for about 5-15 minutes. The participants were informed about the details of the study. They were asked about their demographic details such as age, education and birth order. This was followed by an interview that consisted of twelve questions for the oldest, middle and youngest children and six questions for the only children. Following the interview, the two questionnaires on emotional maturity (Singh & Bharagava, 1991) and communicative competence (Wiemann, 1977) were administered to them.

Results

Case study – 1

01 is a 21-year-old MSc Applied Psychology student. She is located in Chennai, Tamil Nadu. She has a younger brother, eight years younger to her. On being asked regarding her birth order and sibling relationship, she reported as follows:

The participant described herself as an ambivert as she likes to mingle with people as well as have time for herself. She claimed to be the group leader figure in social groups.

She has an age gap of eight years with her younger brother, so she believes she is a mother figure to him. He obeys everything she says and looks up to her. She mentioned that her parents give more attention to her brother, but she understands this as she is old and mature. She said that their relationship could be better if she could find some time to help him with his studies. She also said that she would like to switch roles with her sibling as he does not have much responsibility and gets away with mistakes. Her relationship with her sibling does not impact her other relationships. She is a future-oriented person and she does not have feelings of superiority or inferiority.

About being the eldest sibling, she said that it comes with responsibility and she needs to serve as a role model with her parents expecting her to be a perfectionist.

Case study – 2

02 is a 21-year-old female doing a Masters in Counselling Psychology. She is located in Chennai, Tamil Nadu. She has a younger brother, seven years

younger to her. On being questioned regarding her birth order and sibling relationship, she reported the following.

She said that she likes to stick to her own circle but can also talk to people in social gatherings. She spoke about her ambitions of doing business.

She said she is close to her sibling. She believes she is given more importance as her parents approach her with problems that need a resolution. Her brother is studying abroad, so she believes that they would have had a better relationship if they were closer. She said she would not like to exchange roles with her sibling. She also said that this relationship does impact her other relationships as being the first child makes her dominant. She does not have feelings of inferiority or superiority and she focuses on the present and future.

Case study – 3

03 is a 19-year-old male subject pursuing B. Com. He is located in Chennai, Tamil Nadu. He is the middle child and has an elder brother, 2 years elder to him and a younger sister, 5 years younger to him. On being questioned regarding his birth order and sibling relationship, he reported the following:

He described himself as a reserved person. He usually interacts with people based on how they react with him.

He said he is very close to his elder brother and they have a lot of common friends, but as his sister is younger, they do not talk much. The participant was hesitant when asked if he is treated the same as his siblings, but he said he is. He said that he screams at his parents when they don't give him attention. He said he feels his brother gets more attention than he does as he studies a lot. He tends to yell at his friends if he's had a fight with his siblings. He has no feelings of inferiority or superiority and claimed to be a future-oriented person and that he has his future planned for the next forty years.

He mentioned that being a middle child is tough.

Case study – 4

04 is a 19-year-old female pursuing BSc Psychology Honours. She is located in Chennai, Tamil Nadu. She is a middle child and has a younger brother, six years younger to her and an older sister also six years older. On being questioned regarding her birth order and sibling relationship, she reported the following:

She said that she is a very kind, talkative, happy and independent person.

She described her relationship with her older sister as good and with her brother, she isn't as close to him, but she hopes to develop a better relationship. She spoke about having an inferiority complex when she was younger, as her sister got the responsibility and her brother was pampered. She mentioned feeling left out. But she believes that this has made her independent.

She said that her relationship with her brother could be better. She wants to be there for him as her parents and him have a substantial generation gap. She mentioned having a little trouble being his friend. She said that she receives the attention that she wanted when she was younger. This could either be because she is used to it or she might receive that extra attention now. She used to want to exchange roles with her sister, but now she's reported that she has grown as a person. She said her relationship with her siblings impacted her relationship with her parents as she tends to get defensive around them and this leads to fights. She believes that she is attention-seeking with peers to compensate for not getting enough attention at home. She has grown out of her feelings of inferiority with peers. She is a future-oriented person. She mentioned feeling jealous of her siblings all the time, as her brother gets attention being the only boy in the family. She is jealous of her sister's success and people oversee her contributions.

About being the middle child, she believes that they are independent and can take care of themselves.

Case study – 5

05 is 22 years old. She is a female student pursuing Masters in Psychology. She is studying in Bangalore but is originally from Chennai, Tamil Nadu. She has a sister seven years elder to her. On being questioned regarding her birth order and sibling relationship, she reported the following:

She described herself as someone who is at her best when she is by herself. Regardless, she is also good with people.

She said that she always looked up to her sister as she was extremely responsible. Her sister treats her like a child sometimes as they have a seven-year age gap. She used to be jealous that her sister had new friends in college. She mentioned that she got closer to her sister once her sister came back from Germany. They have fights about differing ideologies. She said, "Blood is thicker than water" and they get past these differences. She is comfortable with the fact she is not like her sister. Her sister is pregnant

and so she is extremely close to her sister and attached to the baby. She believes that she is given more attention than her sibling as her sister is considered to be the responsible one. She said that she was pampered, and her parents even said that she was their favorite daughter. Her parents always believed her sister is mature enough to understand.

She believes that their relationship can be better through communication and her brother-in-law has helped with bridging the gap. Even though she wants to share things, her sister advises her like a parent. She feels she doesn't have to be responsible as she is the second child. She doesn't necessarily want to switch roles, but she wants to be more responsible. She has felt jealous of her siblings, but she's always received more attention as her sister is old. Concerning her relationship with others, she believes that her partner was too much like her sister and so things didn't work out as expected.

She said that her past defines her future. She used to cling onto the past and got over this with the help of therapy. She has a habit of making friends who are better off than her, as they can benefit her. This brings about a feeling of inferiority.

Case study – 6

06 is a 19-year-old student pursuing Biomedical Engineering. She is located in Chennai, Tamil Nadu. She has an elder brother, six years elder to her. On being questioned regarding her birth order and sibling relationship, she reported the following:

She believes that she is hard-working, and she is introverted.

She does not share everything with her brother as she feels he can be a third parent to her. She wasn't treated the same as her sibling for a long time and her parents were protective of her and gave him a lot more freedom. It took a lot of convincing to have it changed. She feels that her relationship with her brother could be better as she could be more open with him. She believes she receives adequate attention. She said she would love to exchange roles with her brother as he finds it easy to talk to anyone and her parents give him a lot of attention. She has feelings of inferiority and she is a future-oriented person. She does envy her brother for how he is.

Case study – 7

07 is a 21-year-old student pursuing MSc Psychology. She is located in Chennai, Tamil Nadu. She is an only child. On being questioned regarding

her, she reported the following:

She describes herself as straightforward, organized and she trusts people easily. She believes loyalty to be the most important.

She does wish that she had a sibling. Sometimes she feels inferior if people dominate her, but most of the time she feels neutral. She focuses on the present and considers future consequences and learnings from the past. She receives a lot of parental attention and they are overprotective. She mentioned that being an only child is difficult, but she is proud of her achievements and likes that her parents are supportive of her.

Case study – 8

08 is a 22-year-old male student pursuing Bachelors in Engineering. He is located in Bangalore, Karnataka. He is an only child. On being questioned regarding his birth order, he reported the following:

He described himself as logical, analytical and mature.

He used to wish that he had siblings but over time he realized that being an only child is better. He does not feel inferior, but in some cases, he does feel superior to certain people who do share a same background as he does. He claims to be a future-oriented person with learnings of the past. He does not feel lonely as he believes that he has other forms of support. He believes that being an only child is great as he gets all the attention and does not have to share things with anybody.

Table 1: Emotional Maturity among Different Birth Orders

Code No	Age	Birth Order	Scores	Interpretation
01	21	Eldest	82	Moderately Emotionally Mature
02	21	Eldest	96	Emotionally Immature
03	19	Middle	156	Extremely Emotionally Immature
04	19	Middle	101	Emotionally Immature
05	19	Youngest	155	Extremely Emotionally Immature
06	22	Youngest	153	Extremely Emotionally Immature
07	21	Only	126	Extremely Emotionally Immature
08	22	Only	102	Emotionally Immature

Table 2: Communicative Competencies

Code No	Age	Birth Order	Score
01	21	Eldest	141
02	21	Eldest	136
03	19	Middle	128
04	19	Middle	150
05	19	Youngest	96
06	22	Youngest	129
07	21	Only	148
08	22	Only	141

Table 3: Analysis of Communicative Competence Scores and Emotional Maturity Scores

Code No	Age	Birth Order	Group Mean (CC)	Standard Deviation (CC)	Group Mean (EM)	Standard Deviation (EM)
01	21	Eldest	138.5	3.53	89	9.89
02	21	Eldest				
03	19	Middle	139	15.56	128.5	38.89
04	19	Middle				
05	19	Youngest	112.5	23.33	154	1.41
06	22	Youngest				
07	21	Only	144.5	4.94	114	16.97
08.	22	Only				

Discussion

Some of the similarities observed between the eldest birth orders were that these individuals enjoy social gatherings but also need time for themselves. Due to the large age gap, these individuals tend to become a third parent for their siblings. They would like to maintain a better relationship with their siblings but due to their responsibilities, they do not find the time to do so. Thus, the eldest siblings tend to have a lot of responsibility and they are achievement driven. One difference observed was that one of the participants was always seen as a group leader whereas the other seems to be relatively reserved and does not like to take the lead.

Both the middle children mentioned being closer to their older sibling. This could be due to the age gap being greater with the youngest sibling in both

the cases. They also mentioned that the eldest child is given more attention as they are considered to be mature. This relationship impacts their personal relationships in a way that one participant tends to displace his anger onto his friends; and the other tends to seek attention from friends due to lack of the same at home. One of the participants mentioned growing out of inferiority. It can be assumed that being a middle child might be difficult, but this results in independency as they learn to take care of themselves.

The youngest children have reported to be at their best when they are by themselves. Both the participants wished they had a better relationship with their older sibling(s) in terms of closeness. But their siblings tend to give them unwarranted advice, and they usually take up the role of a third parent. It was observed that both the participants were pampered as they are the youngest children. Their parents tend to be more protective of them (Thomasgard & Metz, 1997). This causes jealousy as the elder siblings are perceived as the responsible and mature one. Both have reported as having mild feelings of inferiority.

The only children were seen to be organized and mature. They have high achievement drives and are clear about their goals. Initially, both the participants wished they had siblings but realized that receiving undivided attention from their parents has helped them grow in their life. One of the participants also feels superior to others, which is in line with the Adlerian description of only children (1928).

Most of the participants were found to be future-oriented, in the sense that they focus more on their future achievements and learnings. Some participants mentioned that they do acquire learnings from the past and this has an impact on their future, however, none of the participants were seen to be dwelling or preoccupied with their past. Most of these case studies have exhibited traits like those defined by Adler (1928).

The means for communicative competencies for eldest children and middle children is similar. The reason for this might be that in the current study, eldest and middle children are often independent and might have similar communication styles to convey their concerns. The only children are seen to have a high communicative competence. Thus, they might generally be more sensitive, flexible and assertive. The youngest children have a relatively low score on communicative competence. The reason for their relative discomfort with conversation might arise out of their aforementioned reports of inferiority complex.

The eldest children are seen to have a high score for emotional maturity.

This could be due to their sense of responsibility. They are highly stable with their emotional regulations and are also expected to serve as a role model for their younger siblings. The only children are also seen to be emotionally mature. They might have feelings of superiority as they are used to receiving attention from their parents. The middle children come after eldest and only children in emotional maturity. This might be due to their sense of independence, but they also have feelings of inferiority. The younger children are relatively low on emotional maturity. They possess feelings of inferiority and wish they were closer to their siblings.

In conclusion, the self-reported interview suggests traits as defined by Adler to the corresponding birth orders. Eldest and only children have high emotional maturity and communicative competence. They are followed by middle children. Finally, youngest children have relatively low emotional maturity and communicative competence.

Limitations

1. This study has not taken ‘twins’ into consideration
2. This study lacks generalizability to a wider population due to the limited sample size.
3. Age difference might be a confounding variable for the communication gaps defined by the participants.

Findings

1. Birth order is seen to influence communicative competence and emotional maturity among individuals.
2. Most of the participants claimed to be future-oriented and goal-driven, regardless of their birth orders.
3. Elder children are seen to be ambiverts though Adler talks about extroversion associated with this birth order (1928).

Future Scope

1. The two questionnaires can be administered to a larger sample size for greater generalizability
2. This study serves as a pilot study for the above

Implication

The implication of this study can be applied in integration of personality

and maintaining better sibling relationships to enhance emotional maturity and communicative competence. It also stems future directions for research on various other facets of personality based on birth order.

Conclusion

The case studies draw patterns between the groups (eldest, middle, youngest and only children) and the similarities and differences have been discussed in the study. The eldest children are seen to be responsible. They serve as role models for the younger sibling. The middle children are independent. The only children are also seen to be responsible and achievement-driven. The youngest children receive a lot of attention from their parents.

It can be concluded that, elder and middle children are seen to have the highest communicative competence, followed by middle children and youngest children respectively. It is also seen that eldest children are the most emotionally mature followed by only children. Middle children come next and youngest children are the most emotionally immature.

References

- About Alfred Adler. (n.d.). Retrieved from <https://www.adler.edu/page/about/history/about-alfred-adler>
- Adler's Birth Order Theory. (n.d.). Retrieved from <https://www.livestrong.com/article/73327-adler-birth-order-theory/>
- Adler, A. (1928). Characteristics of the first, second and third child. *Children: The Magazine for Parents*, 3(5), 14-52.
- American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.
- Aminbhavi, A. V., & Pastey, S. G. (2006) Impact of Emotional Maturity on Stress and Self Confidence of Adolescents. *Journal of the Indian Academy of Applied Psychology*, 32(1), 66-70.
- Bachman, L.F. (1990). *Fundamental Considerations in Language Testing*. Oxford etc.: OUP.
- Bedford, V. H., & Volling, B. (2004). A dynamic ecological systems perspective on emotion regulation development within the sibling relationship context. In F. R. Lang & K. Fingerman (Eds.), *Growing together: Personal relationships across the life span* (pp. 76–102). New York: Cambridge University Press.
- Curry, G. (2015, November 18). Birth Order and Its Impact on Communication. Retrieved from <https://prezi.com/jvmpytwgxfac/birth-order-and-its-impact-on-communication>
- Dunn, J., Slomkowski, C., & Beardsall, L. (1994). Sibling relationships from the preschool period to through middle childhood and early adolescence. *Developmental Psychology*, 30, 315–324.

- Fullerton, C. S., Ursano, R. J., Wetzler, H. P., & Slusarcick, A. (1989). Birth Order, Psychological Well-Being, and Social Supports in Young Adults. *The Journal of Nervous and Mental Disease*, 177(9), 556-559. doi:10.1097/00005053-198909000-00007
- Habermas, J. (1970). Towards a theory of communicative competence. *Inquiry*, 13 (1-4), 360–375. doi:10.1080/00201747008601597
- Hoff-Ginsberg, E. (1998). The relation of birth order and socioeconomic status to children's language experience and language development. *Applied Psycholinguistics*, 19(04), 603. doi:10.1017/s0142716400010389
- Jaime_mi. (2016, March 01). Communicative Competence. Retrieved from <https://linguisticator.com/communicative-competence/>
- Joy, M., & Mathew, A. (2018). Impact of Birth Order on Emotional Maturity and General Well-being of Adolescents. *International Journal of Education and Psychological Research*, 7(4), 27-33.
- Kennedy, D. E., & Kramer, L. (2008). Improving Emotion Regulation and Sibling Relationship Quality: The More Fun with Sisters and Brothers Program*. *Family Relations*, 57(5), 567–578. doi:10.1111/j.1741-3729.2008.00523.x
- Leman, K. (2009). *The Birth Order Book; why you are the way you are*. Grand Rapids, MI Revel.
- Murawski, M. (1995). Birth Order and Communication Skills of Pharmacy students. *Perceptual and Motor Skills*, 80(3), 891-5.
- Mahmoudi, A. (2012). Emotional maturity and adjustment level of college students. *Education Research Journal*, 2(1), 18 -19.
- Priya, K., & Raina, G. (n.d.). Gender, Family Size and Birth Order as Determinants of Emotional. *Indian Journal of Psychological Science*, 6, 133-140.
- Rohrera, J. M., Egloff, B., & Schmukle, C. (2015, November 17). Examining the effects of birth order on personality. (C. F. Chabris, Ed.) *PNAS*, 112(36), 14224–14229. Relation to Birth Order and Selected Stream of Study. *International journal of innovative research & development*, 5(4), 62.
- Shimisiya, T., & Abdul, K. (2016, march). Emotional Maturity of Higher Secondary School Student's in Relation to Birth Order and Selected Stream of Study. *International journal of innovative research & development*, 5(4), 62.
- Sulloway, F., J. (2010). Why siblings are like Darwin's finches: Birth order, sibling competition and adaptive divergence within the family. *The Evolution of Personality and Individual Differences*, eds Buss DM, Hawley PH (Oxford Univ Press, Oxford), pp 87–119.
- Saroglou, V., & Fiasse, L. (2003). Birth order, personality, and religion: A study among young adults from a three-sibling family. *Personality and Individual Differences*, 35(1), 19-29. doi:10.1016/s0191-8869(02)00137-x
- Sharma, B. (2012). Adjustment and Emotional Maturity Among First Year College Students. *Pakistan Journal of Social and Clinical Psychology*, 10(2), 32-37.
- Thawani, Archana, Impact of Birth Order on Personality and Emotional Maturity in Relation to Gender. (September 23, 2015). *Research AajTak*, Vol. 4 No. 1, p. 23, April to June 2015. Available at SSRN: <https://ssrn.com/abstract=2664720>

- Thomasgard, M., & Metz, W. P. (1997). Parental overprotection and its relation to perceived child vulnerability. *American Journal of Orthopsychiatry*, 67(2), 330–335. doi:10.1037/h0080237
- Volling, B. L., McElwain, N. L., & Miller, A. L. (2002). Emotion Regulation in Context: The Jealousy Complex between Young Siblings and Its Relations with Child and Family Characteristics. *Child Development*, 73(2), 581–600. doi:10.1111/1467-8624.00425
- Visvanathan, K, & S. (2011). “A Study on Emotional Maturity of College Students”. *Recent Research in Science and Technology*, 3(1).
- Wiemann; J. M. (1977). Explication and test of a model of communicative competence. *Human Communication Research*, 3, 195-213 (n.d.). Retrieved from <http://www.uky.edu/~bostrom/BIRTH12.htm> (n.d.). Retrieved from <http://www.adlerian.us/birthord.htm>



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