

EFFECTS OF TWO COUNSELLING THEORIES ON AUTOMATIC THOUGHT PROCESS OF ADOLESCENT WITH BULLYING BEHAVIOUR IN IMO STATE, NIGERIA

BY

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Abstract

Human thought process is a powerful determinant of emotion and behaviour. This is because people's action/behaviour is derived from information that has been stored in the subconscious mind. Negative thought process makes the subject bigger than it is in people's minds, thus robbing them of their peace of mind. Adolescent thought process needs to be transformed for a better behavioural outcome. This study is on effect of two counselling therapies on the automatic thought process of adolescents with bullying behaviour among junior secondary school students in Imo state, Nigeria. A quasi-experimental pre-test, post-test control research design was used for the study control group design was used. All the junior secondary two students in Imo state constituted the population for the study. Multi-stage sampling process was used to select the treatment sample of 90 students. The students with bullying behaviour was assessed using Olweus bully/victim questionnaire as a baseline test. Other instruments used are the Automatic Thoughts Questionnaire (ATQ) by Hollon & Kendall, Rational and Irrational Beliefs Scale (RAIBS). All the instruments were used to obtain both the pre-treatment assessment scores and post-treatment assessment scores. Three research hypotheses were also formulated and tested at 0.05 level of significance. The generated data for the testing of the hypotheses were analysed using 2x4- Analysis of Covariance (ANCOVA). The findings from the study showed that automatic thought process of adolescent influenced their bullying behaviour. The findings evidenced that the two counselling theories used were all efficacious in modifying the automatic thought process of adolescent with bullying behaviour. This study recommends that Counsellors should make use of the two counselling theories to help adolescent with bullying behaviour in transforming their thought process because they are effective intervention. Differences in the perception and execution of bullying behaviours may imply that schools need to apply different target intervention strategies, depending on a range of different factors such as age, gender and adolescent mental development.

Keywords: Age, Automatic thought process, cognitive restructuring, Gender, social-emotional learning strategies.

Introduction

Automatic Thoughts are thoughts that automatically arise in individual minds all throughout the day. People's minds are thought-processing machines, creating and sifting through many ideas in a given day. The brain helps in filtering what it deems unimportant information and focusing on what seems most salient. It does this by focusing on certain aspects of a situation and then assigning some kind of meaning to those aspects, resulting in our thoughts and opinions about things (Beck, 2012). To Rana, Sthapit and Sharma (2017), Automatic thoughts are images, words, or other kinds of mental activity that pop into your head in response to a trigger. These thoughts can seem unimportant, but they can be extremely impactful. When they are negative they become problematic to the individual having them. This may lead to negative aggressive behaviour such as bullying. Hostile automatic thoughts refer to the negative automatic and recurring thoughts in the mind designed to physically assault, degrade, and retaliate against other people. Negative automatic thoughts include those related to physical threat, social threat, failure, and hostility (Hogendoorn et al., 2010), and these negative thoughts can influence a person's behaviour. Dobson, & Dozois, (2010) in his findings concluded that negative automatic thought leads to erroneous conclusions (cognitive distortion) which may create mental gaps between underlying beliefs and behaviour/ actions.

Revill et al. (2020) discovered that hostile automatic thoughts were predictive of the emergence of adolescent externalizing behaviours, such as aggressive, hyperactive, and delinquent behaviours. Moreover, Zhu et al. (2023)

found that hostile automatic thoughts predicted cyber aggression among college students. Negative thoughts come to mind when someone gets addicted to aggressive, violent and bullying behaviour through physical observation or the internet. All people experience automatic thoughts but negative automatic thoughts contribute to distress and inhibit daily functioning. Swearer & Hymel, (2015), findings revealed that repeated exposure to uncontrollable stressful life events can have an effect on people's cognitive processes, leading them to view and interpret stressful events in a negative and hostile manner. Consequently, when faced with novel life stressors, individuals may automatically harbor hostile thoughts about themselves and thus react with aggressive behaviors such as bullying. Adolescents in our secondary schools today involve in bullying behaviour to exercise control and dominance over others. Olumide, (2015); Olweus (2013); Onukwufor 2013) the term bullying is associated with aggression, the forceful use of physical or psychological powers, threats, persistent or intentional harassment, or the oppression of defenseless adolescents with a tendency to inflict either physical or psychological pain on others.

Gender norms are normative societal expectations regarding the behaviors of girls and boys that can guide bullying behavior. As early adolescence is a time when peer relations become increasingly important, it is critical to understand adolescents' automatic thought process and what is considered gender non-confirming behavior. Gender patterns in bullying and aggressive expressions have been evident over time. Casper & Card, (2017) concluded that boys were more overtly involve in bullying behaviour (direct, physical) than girls. In a meta-analysis by Cook, Williams, Guerra, Kim and Sadek (2010), in their analysis showed a stronger correlation for boys to be bullies compared to girls. Research has tried to explain gender differences in bullying by stating that boys are more socialized to use direct physical aggression, whereas girls have learned to use less aggression, or to vent their aggression indirectly thereby involving in relational and social bullying (Hellström, & Beckman, 2020). They asserted that Boys' perception or thought process is that they have to win every fight because that is built in the expectations of being male, they have to be the best and cannot back down even an inch. Because of this automatic thought process, it is easier to detect boys who are weak (Hellstrom, & Beckman, 2020; Björkqvist & Österman 2018 and Hwang et al. 2018).

Furthermore, students' automatic thought process about bullying behaviour changes with age, as there are suggestions that younger students tend to focus more on physical forms of bullying (such as fighting), while older students include a wider variety of behaviours in their view on bullying, such as verbal aggression and social exclusion Hellström, Persson, & Hagquist 2015). A recent systematic review indicates that older students (15 years and over) were able to differentiate between aggressive and non-aggressive behaviour, physical and non-physical bullying and also characterize bullying behaviour as involving a power imbalance and repetitive behaviour, whereas younger participants (10-13year-olds) could only differentiate between aggressive and non-aggressive behaviour (Younan, 2019). This suggests that cognitive development may allow older students to conceptualize bullying along a number of dimensions. Furthermore, some research has indicated that younger students tend not to be repeatedly victimized over long periods of time (Hellström, & Lundberg, 2020), meaning that younger and older students may differ in including repetition as a part of their definition of bullying.

Cognitive restructuring is a strategy to recognize negative, inaccurate thoughts and replace them with alternative ones that are more realistic and helpful. This cognitive strategy, a key part of cognitive behavioral therapy, promotes optimal thinking about a stressful or overwhelming situation to reduce emotional distress. Cognitive restructuring may involve several steps: write down the situation; list negative thoughts that occurred during the situation; list emotions that arise when having these thoughts; identify cognitive distortions or errors that may underlie each thought; challenge each thought; and generate rational responses. The rational responses are self-statements that are used to feel better about the situation. Cognitive restructuring may help individuals with aggressive bullying behaviour to manage how the behaviour affects their perceptions of themselves, their relationships, and their future. The type of cognition that is most commonly subjected to cognitive restructuring is the automatic thought, named as such because it is a thought that emerges seemingly instantaneously when a person is faced with a challenging or aversive situation. The specific nature of the automatic thoughts that are observed are typically influenced by the contents of a person's underlying core beliefs, or fundamental beliefs that people hold about themselves, others, the world, or the future. Core beliefs usually develop through early life circumstances and experiences, although they can be altered (sometimes radically) by notable events that take place during adulthood

Cognitive restructuring technique has recorded success in managing a range of behavioural problems as revealed by research findings by Walsh (2013) for instance successfully used cognitive restructuring to treat depression caused by cyber bullying. Similarly, the study by Olufunmilola (2014), showed the efficacy of cognitive restructuring on bullying as a conduct disorder, Olatunbosun and Ugwu's (2016) study revealed that cognitive behaviour therapy had significant efficacy of reducing bullying on the experimental group of studies in carried out in Ikwerre, Rivers state. Thus, the technique, according to Lohmann (2014), is the most widely acclaimed, trusted and research supported treatment method for the treatment of conduct problems. Nwokolo, Anyamene, Nzerem & Okwuaku (2020) recorded success in using cognitive restructuring in treating Bullying Behaviour Among Secondary School Students in Imo State This perhaps could be attributed to the notion that Cognitive behaviour therapy teaches individuals to understand their thoughts and feelings better in relation to the situation. Furthermore, it teaches how their thoughts and feelings, as well as beliefs, influence their actions and ultimately their behaviour. In the context of this study, cognitive restructuring can be defined as a therapeutic tool used by the counsellor to ensure that the client maintains a sound reasoning and gives an objective interpretation of a case regardless of the cause of problematic circumstance in question.

Social and emotional learning, refers to the process through which individuals learn and apply a set of social, emotional, and related nonacademic skills, attitudes, behaviors, and values that help direct their thoughts, feelings, and behaviour in ways that enable them to succeed in school, work, and life (Jones et al., 2017). Social emotional learning (SEL) is a structured way to improve a wide range of students' social and emotional competencies and impact bullying at the individual and peer levels of the school social-ecology. Social-emotional learning is the process of developing the self-awareness, self-control, and interpersonal skills that are vital for life success. These therapies are considered to be efficacious in transforming the mental model of adolescents with bullying behaviour were employed. The research carried out by Gravestijn, Diekstra, & Petterson (2016), the results indicate that social and emotional learning skills programs has a positive influence on bullying

Smith & Low (2013) from their finding on the role of social –emotional learning indicated that social-emotional learning skill program has been shown to be an effective component in comprehensive bullying prevention interventions and other interventions targeting problems such as substance abuse. Social –emotional learning programs have also been shown to improve student skills, reduce problem behaviors, and increase academic achievement. This article discusses how skills taught in SEL programs contribute to bullying prevention and shows the research links between SEL skills and bullying. Specific suggestions are provided for teachers of ways to support student skill acquisition and strengthen the gains provided by social –emotional learning programs.

Statement of problem

Adolescent developmental period is troubled with terrifying experiences and disruptive behaviours such as bullying associated with vicious consequences. Bullying behaviour adversely affects all involved including the victims, perpetrators and observers with more futuristic consequences in adolescents manifesting as suicide, depression, anxiety, psychiatric disorders, risky behaviour, low self-esteem, personality and other forms disorders. Numerous adolescents are afraid to go to school or interact with some of their peer groups because of threats, or victimization they experience. Bullying among adolescent students in Nigeria have reached a critical height due to increased violent and anti-social demeanors pervading the society which has affected their mental model. Bullying in schools are critical and difficult social problems, probably, the most common and noticeable problems among school adolescents.

It is worrisome to discover that bullying behaviour emanated from unchecked behavioural deficiency patterns. As a result of the unchecked ugly development, there is increase in bullying behaviour among students who may later make life difficult in the community. It then means that if this kind of behaviour is not look into, there would be high level of negative behaviours. Therefore, this study focuses on using two counselling therapies to address the issues automatic thought process of adolescents with bully behaviour in Imo state, Nigeria.

Research Hypotheses

The following research hypotheses were formulated to guide this study:

1. There is no significant difference in the post-test mean score on automatic thought process as a result of exposing adolescent with bully behaviour to two counselling therapies and control group
2. There is no significant gender difference in the post-test mean on automatic thought process as a result of exposing adolescents with bully behaviour to two counselling therapy and control group
3. There is no significant age difference in the post-test mean score on automatic thought process as a result of exposing adolescents with bully behaviour to two counselling therapies and control group.

Research Methodology

The design for this study was a quasi- experimental pre-test, post-test control group research design. A quasi-experiment is an **empirical** interventional study used to estimate the **causal** impact of an intervention on target population without assignment. It allows the researcher to control the assignment to the treatment condition. The population is all junior secondary school (J.S.S.II) and senior secondary school student (SS 11) in public school system in Imo state.

Simple and sampling Techniques.

A multistage sampling approach was adopted to select the participant for this study, this involved simple random sampling and purposive sampling techniques at different stages. Altogether a total of ninety (90) students were randomly selected for the study.

Research instrument

The instruments used for data collection are the Automatic Thoughts Questionnaire (ATQ). Three experts were involved in the validation of the questionnaire. Instrument corrections were therefore effected before administering to the targeted audience. Reliability of instrument was done using Cronbach alpha statistics. The reliabilities coefficient was 0.83.

Data Analysis

The statistical tests used were the descriptive analysis involving the percentage. Analysis of variance (ANOVA) was employed to test the null hypotheses at 0.5% level of significance.

RESULTS

Table 1

One-way ANCOVA for post-test scores on Automatic Thought Process sing pre-test score as covariate

Source	Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	2795.81	3	931.94	46.74	0.000
Intercept	106.78	1	106.78	5.36	0.023
Covariate	357.74	1	357.74	17.94	0.000
Group	2741.01	2	1370.50	68.74	0.000
Error	1714.59	86	19.94		
Corrected Total	4510.40	89			

As shown in table 1, the F-calculated value of 68.74 was significant at 0.05 level. This value exceeded the critical value of 3.13 for at significance level of 0.05, with degrees of freedom of 2 and 86. Consequently, the null hypothesis was rejected, indicating a significant difference in automatic thought processes due to exposure to three experimental conditions.

Research hypothesis 2: There is no significant gender difference in the post-test mean on automatic thought process as a result of exposing adolescents with bully behaviour to two counselling therapy and control group

Table 2: Mean and standard deviation of pre-test and post-test scores automatic thought process due to gender

N Pre-test Post-test

Experimental Group	Gender of Participant	Mean	Std. Dev.	Mean	Std. Dev.	Mean Difference	
Cognitive Restructuring	Male	6	23.33	4.41	30.33	5.89	7.00
	Female	24	25.29	5.09	33.25	4.53	7.96
	Total	30	24.90	4.95	32.67	4.87	7.77
Social Emotional Learning Therapy	Male	13	24.62	5.09	32.62	2.69	8.00
	Female	17	22.29	5.19	33.41	2.48	11.12
	Total	30	23.30	5.19	33.07	2.56	9.77
Control Group	Male	15	29.13	5.36	31.00	4.19	1.87
	Female	15	30.13	5.66	28.33	7.04	-1.80
	Total	30	29.63	5.44	29.67	5.85	0.03
Total	Male	34	26.38	5.56	31.50	4.02	5.12
	Female	56	25.68	5.99	31.98	5.29	6.30
	Total	90	25.94	5.81	31.80	4.83	5.86

*significant <0.05, F critical (2.86) =3.1

The information provided in Table 2 illustrates that male participants undergoing SELT demonstrated the most substantial enhancement in s compared to other groups, registering 8.0. Likewise, female participants in SELT exhibited more significant improvement, recording 11.12 in automatic thought process compared to those in CBT, who achieved 7.92.

Table 3: One-way ANCOVA on post-test scores on automatic thought process based on Gender Result for automatic thought process and Gender using pre-test scores as covariate

Source	Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	2435.67	6	405.94	25.22	0.000
Intercept	298.35	1	298.35	18.54	0.000
Covariance	462.29	1	462.29	28.72	0.000
Group	1745.81	2	872.90	54.23	0.000
Gender	65.95	1	65.95	4.10	0.046
Group * Gender	116.14	2	58.07	3.61	0.031
Error	1335.93	83	16.10		
Corrected Total	3771.60	89			

*Significant<0.05, F critical (2.86) =3.1.

The analysis results in Table 23 indicate the rejection of the null hypothesis 6, as the F-calculated value of 3.61 exceeds the critical value of 3.11, with 2 and 83 degrees of freedom at a significance level of 0.05. It was concluded that there is a significant difference in the post-test mean on automatic thought process among adolescents exposed to the two counselling therapies, and the control group based on gender. Male participants were noted to have a more substantial reduction.

Research hypothesis 3: Research hypothesis 3: There is no significant age difference in the post-test mean score on automatic thought process as a result of exposing adolescent with bully behaviour to two counselling therapies and control group.

Table 4: Mean and standard deviation of pre-test and post-test scores automatic thought process due to gender

Experimental Group	N	Pre-test	Post-test
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	Age of Participant	Mean	Std. Dev.	Mean	Std. Dev.	Mean Difference	
Cognitive Behavioural Therapy (ages)	10-14	6	31.50	4.68	22.50	6.80	-9.00
	15-18	24	27.17	4.61	17.63	3.95	-9.54
	Total	30	28.03	4.87	18.60	4.93	-9.43
Social Emotional Learning Therapy	10-14	13	28.38	5.88	19.77	4.42	-8.62
	15-18	17	29.41	5.59	16.24	2.25	-13.18
	Total	30	28.97	5.64	17.77	3.75	-11.20
Control Group	10-14	15	24.87	6.20	26.20	5.44	1.33
	15-18	15	27.40	5.91	28.67	5.84	1.27
	Total	30	26.13	6.09	27.43	5.69	1.30
Total	10-14	34	27.38	6.21	23.09	5.96	-4.29
	15-18	56	27.91	5.28	20.16	6.63	-7.75
	Total	90	27.71	5.62	21.27	6.51	-6.44

The analysis presented in Table 3 reveals that the adolescents ages 10-14 participants exposed to SELT exhibited a superior reduction in automatic thought process than adolescents between 15-18 years of age, recording 9.0. Conversely, for ages 10-14 participants, SELT demonstrated a greater reduction, than adolescent ages 15-18 with 13.18. However, both ages participants in the control group experienced a marginal increase in automatic thought process.

Table 5: One-way ANOVA on post-test scores on automatic thought process based on age Result for automatic thought process and age using pre-test scores as covariate

Source	Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	2435.67	6	405.94	25.22	0.000
Intercept	298.35	1	298.35	18.54	0.000
Covariance	462.29	1	462.29	28.72	0.000
Group	1745.81	2	872.90	54.23	0.000
Age	65.95	1	65.95	4.10	0.046
Group * Age	116.14	2	58.07	3.61	0.031
Error	1335.93	83	16.10		
Corrected Total	3771.60	89			

*Significant < 0.05, F critical (2.86) = 3.1.

The analysis results in Table 5 indicate the rejection of the null hypothesis 3, as the F-calculated value of 3.61 exceeds the critical value of 3.11, with 2 and 83 degrees of freedom at a significance level of 0.05. It was concluded that there is a significant difference in the post-test mean on automatic thought process among adolescents exposed to the two counselling therapies, and the control group based on age. Participants from ages 10-14 were noted to have a more substantial reduction.

Discussion of findings

The results as revealed from the finding on hypothesis one shows that a significant difference exists in the participant's post-test mean scores regarding automatic thought processes among adolescents with bullying behaviour subjected to the two counselling therapies and the control group as a result of experimental conditions. Thus, the null hypothesis was rejected. That means adolescents automatic thought process affects their bullying behaviour under the experimental conditions. This finding supports the theoretical assertions made by Beck, (2011) that serious difficulties in human thinking, feeling, behaving, and functioning can occur when there are problems in thoughts and thought processes. This finding also aligns with the findings of Dobson, & Dozois, (2010), which revealed a relationship between dysfunctional automatic thought, cognitive distortion and behavioural problem such as aggression. They concluded that negative automatic thought leads to erroneous conclusions (cognitive distortion) which may create mental gaps between underlying beliefs and behaviours/ actions, the two components of mental model. This finding also aligns with the findings of Disner, Shumake, & Beevers, (2017), which revealed a relationship between dysfunctional automatic thought, cognitive distortion and behavioural problem such as aggression. They concluded that negative automatic thought leads to erroneous conclusions (cognitive distortion) which may create mental gaps between underlying beliefs and behaviours/ actions, the two components of mental model.

Also Revill et al. (2020) discovered that hostile automatic thoughts were predictive of the emergence of adolescent externalizing behaviors, such as aggressive, hyperactive, and delinquent behaviors. Moreover, Zhu et al. (2023) found that hostile automatic thoughts predicted cyber aggression among college students 6 months later. This study thus hypothesized that negative automatic thoughts significantly influence bullying behaviour. The finding in hypothesis two also revealed significant disparity in the post-test mean score concerning automatic thought process and gender following exposure of adolescents with experiences of bullying behaviour to cognitive restructuring, social-emotional learning, and a control group. This shows that adolescents' gender affects their bullying behaviour under the experimental conditions. This result is in support with Casper, & Card, (2017) concluded that boys were more overtly involve in bullying behaviour (direct, physical) than girls. In a meta-analysis by Cook, Williams, Guerra, Kim and Sadek (2010), in their analysis showed a stronger correlation for boys to be bullies compared to girls. Also Hellstrom, & Beckman, (2020); Björkqvist & Österman (2018) and Hwang et al. (2018).), asserted that Boys' perception or thought process is that they have to win every fight because that is built in the expectations of being male, they have to be the best and cannot back down even an inch. Because of this automatic thought process, it is easier to detect boys who are weak.

The findings in hypothesis three further reveal a significant discrepancy in the post-test mean score regarding automatic thought process due to age following exposure of adolescents with experiences of bullying behaviour to cognitive behavioural therapy, social emotional learning therapy, and a control group. That mean null hypothesis was rejected, meaning adolescents automatic thought process in relation to bullying behaviour differs by age their under the experimental conditions. This implies that students' automatic thought process about bullying behaviour changes with age, as there are suggestions that younger students tend to focus more on physical forms of bullying (such as fighting), while older students include a wider variety of behaviours in their view on bullying, such as verbal aggression and social exclusion Hellström, Persson, and Hagquist (2015). A recent systematic review indicates that older students (15 years and over) were able to differentiate between aggressive and non-aggressive behaviour, physical and non-physical bullying and also characterize bullying behaviour as involving a power imbalance and repetitive behaviour, whereas younger participants (10-13year-olds) could only differentiate between aggressive and non-aggressive behaviour (Younan, 2019). This suggests that cognitive development may allow older students to conceptualize bullying along a number of dimensions. Furthermore, some research has indicated that younger students tend not to be repeatedly victimized over long periods of time (Hellström, & Lundberg, (2020), meaning that younger and older students may differ in including repetition as a part of their definition of bullying.

Conclusion

From the discussion in the findings based on the data collected, the following conclusion are made: there exist significant difference on automatic thought processes among adolescents with bullying behaviour subjected to two counselling theories, and the control group. There exists significant disparity in the post-test mean score concerning automatic thought process due to gender following exposure of adolescents with experiences of bullying behaviour to two counselling theories and a control group. Exposing adolescents who have experienced bullying behaviour to cognitive restructuring therapy, social emotional learning therapy, and a control group significantly influences the post-test mean score on adolescent automatic thought process due to age. Adolescent students who involve in bullying behaviour have experienced cognitive distortion due to negative environmental situations where they find themselves.

Recommendations

Based on the findings of the study, the following recommendations are proffered:

1. There should be a National campaign and support for comprehensive psychosocial education that emphasized on automatic thought process and the effect the have on adolescent bullying behaviour, (need to take into cognizance the information people take in from their environment, societal belief that are aggressive in nature)
2. School Counsellors, should devote ample time to inculcate appropriate social-emotional learning skills into the students by deliberately teaching these skills during moral instructions, orientation weeks and special school programmes to encourage interpersonal relationship among students.
3. School counsellors and community agencies should encourage the formation of counselling programmes designed to mitigate the negative outcomes of bullying behaviour to avoid the collapse of this important group of our generation and human society at large

References

- Al-Ali, N. M., & Shattnawi, K. K. (2018). Bullying in school. *Health and academic achievement*, 47-58.
- Beck, J. S. (2011). *Cognitive therapy: Basics and beyond* (2nd ed.). New York, NY: Guilford Press.
- Beck, A. T., & Haigh, E. A. (2014). Advances in cognitive theory and therapy: The generic cognitive model. *Annual Review of Clinical Psychology*, 10, 1–24.
- Casper, D. & Card, N. (2017). Overt and relational victimization: A meta-analytic review of their overlap and associations with socialpsychological adjustment. *Child Development*, 88, 466–483.
- Cook, C., Williams, K., Guerra, N., Kim, T. & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *School Psycho*
- Darjan, I., Negru, M., & Ilie, D. (2020). Self-Esteem--The Decisive Difference between Bullying and Assertiveness in Adolescence? *Journal of Educational Sciences*, 21, 19-34.
- Dobson, K. S., & Dozois, D. J. A. (2010). Historical and philosophical bases of the cognitive-behavioral therapies. In K. S. Dobson (Ed.), *Handbook of cognitive-behavioral therapies* (3rd ed.3–38). New York, NY: Guilford Press
- Duffy, F. M. (2014). Paradigms, mental models, and mind-sets: Triple barriers to transformational change in school systems. *Educational Technology*, 29-33.
- Ekrem S.Ş & Nilüfer V. A. (2019). Rational emotive behavior therapy from a new perspective. *Journal of Human Sciences*, 16(4), 894–906.
- Ford, R., King, T., Priest, N., & Kavanagh, A. (2017). Bullying and mental health and suicidal behavior among 14- to 15-year-olds in a representative sample of Australian children. *Australian & New Zealand Journal of Psychiatry*, 51(9), 897–908.
- Forbus, K. D. (2019). *Qualitative representations: How people reason and learn about the continuous world*. MIT Press.
- Fives, C. J., Kong, G., Fuller, J. R., & DiGiuseppe, R. (2011). Anger, aggression, and irrational beliefs in adolescents. *Cognitive therapy and research*, 35, 199-208.
- Hellstrom, L. & Beckman, L. (2020). Adolescents' perception of gender differences in bullying. *Scandinavian Journal of Psychology*, 61, 90–96

- Hellström, L., & Lundberg, A. (2020). Understanding bullying from young people's perspectives: An exploratory study. *Educational Research*, 62(4), 414-433.
- James, M.L. 2010. School Bullying Juvonen, J. & Graham, S. (2014). Bullying in Schools: <https://www.researchgate.net/publication/355058436>.
- Johnson-laid, Keith-oatley, Philip N., (2014), the communicative theory of emotions: empirical tests, mental models and implications for social interactions striving and feeling (31) ISBN 9781315806396.
- Kocatürk, M., & Türk-Kurtça, T. (2020). Moral Disengagement, Attitudes towards Violence and Irrational Beliefs as Predictors of Bullying Cognition in Adolescence. *International Education Studies*, 13 (10), 47-59.
- Lazaratou H, Stavropoulos V, Dimitris C, & Soldatou A. (2015) self-esteem of Greek adolescents: changes in a decade of socio-economic hardship. *Adolescent Psychiatry*.5 (11), 3-11.
- Magzan, M. (2012). Mental model for leadership effectiveness: building future different than the past. *Journal of Engineering Management and Competitiveness* 2(2), 57-63.
- Ngelu, M. K., & Wambua, L. (2020). The effect of peer influence on bullying trends in secondary schools in Kenya. *Journal of Popular Education in Africa*, 4(10), 21-34.
- Olweus, D. (2017). Our major implementations projects – Iceland. *Olweus International AS. Bergen, Norway*.
- Olumide, A. O., Adams, P., & Amodu, O. K. (2015). International Note: Awareness and context of cyber-harassment among secondary school students in Oyo state, Nigeria. *Journal of Adolescence*, 39(1), 10-14.
- Onukwufor, J. N. (2013). Physical and verbal aggression among adolescent secondary school students in rivers state of Nigeria. *British Journal of Education*, 1(2), 62-73.
- Petterson, D., Gravesteyn, C., & Roest, J. (2016). Strengthening of parenthood; developing a Life Skills Questionnaire for Dutch parents (LSQ-P). *Procedia-Social and Behavioral Sciences*, 217, 748-758.
- Rana M, Sthapit S, Sharma V.D,(2017). Assessment of automatic thoughts I patients with depressive illness at a tertiary hospital Nepal pdfs.semantic scholar.org;cabidigil library.org..
- Revill, A. S., Patton, K. A., Connor, J. P., Sheffield, J., Wood, A. P., Castellanos-Ryan, N., & Gullo, M. J. (2020). From impulse to action? Cognitive mechanisms of impulsivity-related risk for externalizing behavior. *Journal of abnormal child psychology*, 48, 1023-1034.
- Sigurdson, J. F., Undheim, A. M., Wallander, J. L., Lydersen, S., & Sund, A. M. (2015). The long- term effects of being bullied or a bully in adolescence on externalizing and internalizing mental health problems in adulthood. *Child and Adolescent Psychiatry and Mental Health*, (9), 42.
- Soflau.R, David D.O (2017), A meta-analytical approach of the relationships between the irrationality of belief and functionality of thoughts cognitive therapy. *Research Springer* 41,178-192.
- Smith B.H&Low, S (2013). The role of Social-Emotional learning in bullying prevention effort. *Theory into Practice*, 52(4), 280-287.
- Zhu, W., Sun, L., Lu, D., Li, C., & Tian, X. (2023). The longitudinal relation between violence exposure in daily life, hostile automatic thoughts, and cyber-aggression. *Aggressive behavior*, 49(2), 101-109.