

Research Article

Support Service Available to Teachers in Managing Physical Aggressive Behaviours in Early Childhood Centres in the Bolgatanga Municipality of Upper East Region, Ghana

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Abstract

The purpose of this study was to look into the support services available to teachers in dealing with physical violent behaviors among children in early childhood centers in the Bolgatanga Municipality of Ghana's Upper East. For this study, a descriptive survey approach with a mixed methods paradigm was chosen. Structured interviews were conducted for ten (10) headteachers who were purposefully and conveniently selected from ten circuits, and questionnaires were administered to one hundred and twenty (120) early childhood education teachers who were all purposefully selected from sixty (60) early childhood education centres across the Bolgatanga Municipality in Ghana's Upper East Region. For quantitative data, frequency tables and percentages were used, while thematic analysis was used for qualitative data. The study discovered that there is little support available for early childhood education instructors dealing with physical violent behaviors in the Bolgatanga Municipality of Ghana's Upper East Region. The study also concluded that early childhood education teachers are unable to make appropriate use of the support services available in their centers. The Social Learning Theory, the Constructivist model, the Behaviour Model, and the Ecological Model all served as foundations for the study. The researcher proposed that school officials and children's families collaborate to reduce the prevalence and impact of physical violent behaviors in their centers. The researcher thinks that the study will provide major insights into how teachers might be provided with the required knowledge and abilities to cope with varied outbursts of physical aggressiveness in good ways. It will also contribute to the body of literature, both locally and globally, by raising knowledge of successful ways for regulating physical violence in our preschoolers.

Keywords

Physical Aggressive Behaviours, Support Service, Early Childhood Centres

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1. Introduction

1.1. Background to the Study

Researchers in the field of education, policy makers and governments alike have articulated their concerns about physical aggressive behaviours. [12] agreed that aggression, whether physical or verbal, has a negative impact on children's overall development, particularly their social and emotional development; it disrupts the teaching and learning process and limits children's ability to maximize their full potential.

According to [12], Aggression behaviors (physical and verbal) are among the most persistent dysfunctions in children, and if left untreated, the repercussions for children, their families, and society in general are terrible. Although physical aggressive behavior is commonly regarded as typical for a maturing youngster, it can result in an alarming degree of rejection and avoidance by peers and even teachers. It can also provide difficulties for parents, teachers, and society as a whole.

To ensure that children develop holistically, any outburst of violent behavior (physical or verbal) must be carefully watched and treated, or else it might lead to worse issues later in life. According to research, if teachers have problems recognizing and responding effectively to violent behavior scenarios, preventative and intervention efforts may be harmed [16]. It is this concerns that have heightened the researcher's interest to conduct this study to engage teachers in reflecting on their perspectives and strategies of dealing with children who put up physical aggressive behaviours in early childhood educational centres.

1.2. Problem Statement

One of the most major problems that preschool teachers and child care providers deal with each year is physical violence [11]. It remains a severe problem with repercussions for individuals, systems, and the school environment [29].

In a school setting, the term physical aggressive behavior has created a multitude of classifications, allowing educators to designate students who exhibit inappropriate behaviors [1]. Physical aggressiveness is any activity that prevents children from learning or developing normally, hurts the child, other kids, or adults nearby, and puts them at a high risk of developing social problems or failing in school in the future [6]. What constitutes physical violent behavior is determined by the circumstances in which it occurs and how teachers view it [21].

Many teachers struggle with managing physically hostile behaviors in the classroom [1]. Given the important role that instructors are expected to play in prevention and intervention programs, there are negative consequences associated with non-recognition or incorrect recognition of physical aggressive behaviors, as well as a lack of intervention attempts.

Conversations with teachers in the Upper East Region's Bolgatanga Municipal revealed that they were disappointed by the lack of available resources and knowledge in this area and would like to be better equipped to support students with physically violent behaviors. The researcher opted to conduct this study in order to hear from instructors on the support service and the efficiency of their intervention tactics in managing physical aggressive behavior in children at early development centers in the Bolgatanga Municipality.

The study looked into the support services offered to teachers for dealing with physical aggression, as well as the efficiency of teachers' intervention tactics for managing physical aggressive behaviors in the Bolgatanga Municipality in Ghana's Upper East Region.

1.3. Objectives of the Study

The study sought to:

- 1) Identify the support service available to teachers for managing physical aggressive behaviours of children at early childhood centres in the Bolgatanga Municipality.
- 2) Ascertain the effectiveness of teachers' intervention strategies in dealing with physical aggressive behaviours in children at early childhood centres in the Bolgatanga Municipality.

1.4. Research Questions

The study sought to obtain answers to the following research questions:

- 1) What support services are available to teachers for managing children with physical aggressive behaviours at early childhood centres in the Bolgatanga Municipality?
- 2) How effective are teacher intervention strategies in dealing with physical aggressive behaviours at early childhood centres in the Bolgatanga Municipality?

2. Methodology

2.1. Research Design

The descriptive survey method was employed for this investigation. Descriptive survey design is used to gather relevant and exact information about the current state of phenomena and, whenever possible, to derive valid general inferences from the facts gathered [2, 8, 13]. A descriptive survey was chosen by the researcher because it allows them to ask the same set of questions to a large number of respondents, sometimes in the form of printed questionnaires [2].

2.2. Population and Sampling Techniques

The study's population included all early childhood education instructors working in early childhood centers in the Bolgatanga Municipality of Ghana's Upper East Region. The overall projected number of responders was four hundred and fifty (450) from ninety (90) early childhood centers. The accessible population, on the other hand, consisted of one hundred and twenty (120) respondents recruited from sixty (60) centers based on their qualifications and experiences as determined by the Municipal Directorate.

All one hundred and twenty (120) teacher respondents were chosen from a total population of four hundred and fifty (450) instructors because they were all professional teachers who had taught for at least one academic year. Purposive sample was chosen because a limited number of people were likely to have witnessed the occurrence or face physical hostile behaviors in some form [14]. All respondents were regarded successful practitioners by their headteachers/headmistresses and through the attestation process at their centers, and all respondents were classroom teachers.

2.3. Instrumentation

Semi-structured interviews with sixty (60) headteachers and structured questionnaires with one hundred and twenty (120) randomly selected teacher respondents were used to collect data. The goal of conducting an interview is to delve into the comments of respondents in order to acquire more and deeper information. This is due to the fact that, unlike questionnaires, people are more likely to freely answer inquiries on a subject.

3. Literature Review

3.1. Theoretical Framework

3.1.1. Constructivist Model/Pedagogies

Piaget's [19] cognitive-developmental theory, children go through four stages of cognitive development: sensorimotor, preoperational, concrete, and formal. Vygotsky is a well-known developmental theorist whose influence can be observed in early childhood education. Vygotsky is most known for his sociocultural theory, which places learning within a social and cultural framework [30]. Vygotsky argued that interactions between children and their environment, as well as individuals around them, lead to the development of new worldviews, and that this learning is mediated by tools and signs. He also considered that this process was influenced by hereditary factors [34].

According to Vygotsky's sociocultural theory, children's development is advanced when their learning is supported by adult or peer guidance, provided they are in the zone of proximal development. Though the teacher has no direct

authority over the child, he or she has complete control on the child's indirect, mediated effects through the social environment [31]. Education occurs when youngsters actively engage and interact with a more skilled peer or adult, according to Vygotsky [31]. Teaching from this theoretical perspective tries to propel development forward, assessing a child's progress based on future potential rather than previous achievement when supported within the zone of proximal development [31].

3.1.2. Behaviourist Model/pedagogies

Watson [33] created behaviorism, which is based on the premise that behaviors can be measured and modified. Skinner [25], a leading scholar in the field of behaviorism, believes that 'training' can affect behavior. Skinner proposed the notion of Operant Conditioning, which is the modification of antecedents and consequences to modify behavior. He hypothesized that good behavior may be amplified if it was followed by positively reinforcing consequences, or by negative reinforcers that removed unpleasant stimuli from the environment [24, 27, 35].

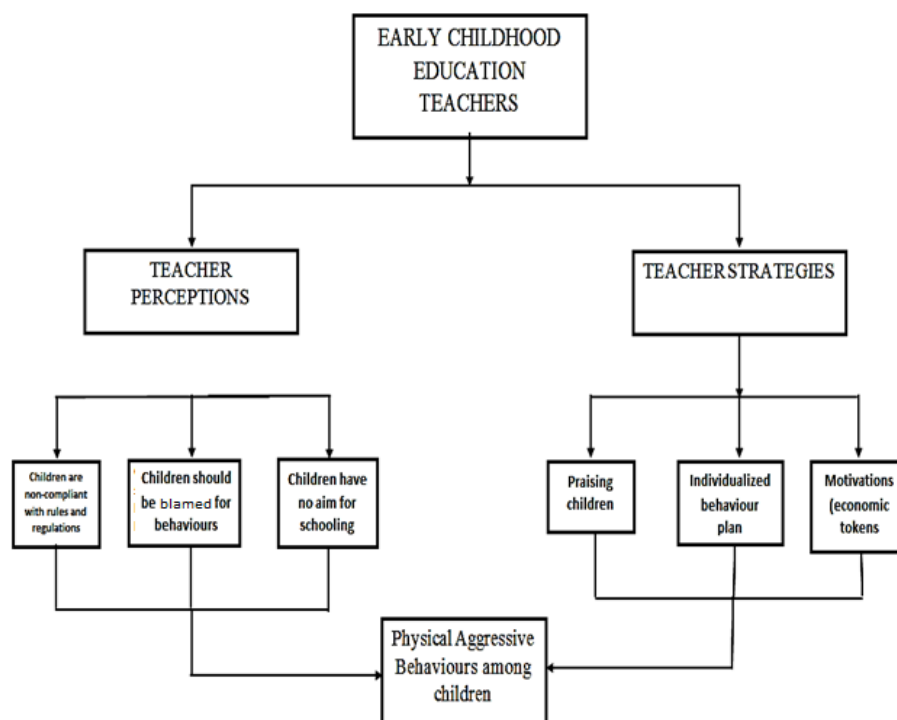
3.1.3. Ecological Model/Pedagogies

An ecological viewpoint views the child in the context of a complex social system and considers how connections between social systems influence behavior. The ecological model proposed by [3] considers several layers of environment, such as the local family environment, school, neighborhood, community, larger cultural norms, and the interconnections between these systems, as important effects on child development. Physical aggression in childhood cannot be fully understood without addressing the effects of a child's ecosystem: both direct and indirect environmental elements have the power to either assist or inhibit development. Interventions for physical aggressive behavior address several facets of a child's surroundings within an ecological setting.

Tam [26] recently developed a Situational Analysis framework for building evidence-based and effective interventions based on ecological theory and sociocultural understandings. This model is based on social interactionism, employs evidence-based therapies, and builds interventions on present strengths in the child's surroundings. This is an example of using a variety of conceptual models to effectively enhance outcomes for children who exhibit physical aggressiveness.

These three separate theoretical approaches on the explanation of physical aggressiveness in early infancy appear to have significant overlap. To comprehend physical aggressive behaviors in young infants, as indicated by Tam [26] Situational Analysis Model, it is frequently required to draw on a number of theoretical models. In practice, an integrated model is required to address the complexities of physical aggressive behavior.

3.2. Conceptual Framework



Source: researcher's own constructed, 2017.

Figure 1. Early Childhood Education Teachers' Perceptions and Strategies Influencing Physical Aggressive Behaviours Among Children.

The conceptual framework of this study is to aid the understanding of the various components of the study. Figure 1 depicts the conceptual framework of how the various components are put together to achieve success in dealing with physical aggressive behaviours among selected early childhood education centres in the Bolgatanga Municipality of the Upper East Region, Ghana.

3.2.1. Strategies in Dealing with Physical Aggressive Behaviours

Strategies employed by teachers in managing physical aggressive behaviours among early childhood children are as follows; Respect, Communication, Connectedness, Praise, Empathy, Caring for Children, Motivation, Diversity in Learning Preferences, Time Out, Classroom/Management and Rules, and Individualized Behaviour Plan

3.2.2. School Support in Dealing with Physical Aggressive Behaviours

1. Quality of School: [10], schools that regulate behavior effectively have deeply ingrained attitudes concerning the safety and well-being of all members of the school community. These ideals pervade the school environment and are explicitly stated in the school mission. He

also thought that a school that fosters excellent behavior will eventually pave the path for a positive school atmosphere--providing a respected and tranquil learning environment. Wang & Fawzi [32] identifies "poor quality schools" as a factor that contributes to poor child outcomes by failing to provide settings for children to reach their full potential. There is a clear correlation between school quality and behavior not only in Ghana, but also in other nations. Meaningful tasks/learning, relevant curriculum, collegiality, and targeted group management skills are some features of outstanding schools and ways to improve school and classroom relationships proposed by Tiina Kivirand et al., [28].

2. Positive Staff Relationships: [7], solid staff relationships, strong collegiality, and an open learning atmosphere are all significant characteristics of high-performing schools. He considered the school climate to be a holistic idea. Promoting a positive classroom culture inside a school that promotes common values is easier and more sustainable. As a result, schools must integrate behavior management to school policies. When classroom connections fail, teachers require adequate and appropriate assistance in order for teaching and learning to take place [23].

3. Classroom confrontations teach children regardless of how they are resolved. Nobody benefits from poorly resolved behaviour difficulties: the teacher's sense of self efficacy is damaged [22]; the physical aggressive child has his behaviour affirmed [5]; and children observing the encounter feel unsafe [4].
4. Small Class Sizes: [17], small class size is one aspect that boosted kid involvement and fostered excellent behavior in the classroom. According to the American Educational Research Association, which Yelkperli et al. [36] cites, teachers in small classes give more attention to each kid. Children in these classes are constantly pressured to participate in learning activities and grow into better, more involved students. Learning attention increases while disruptive and off-task behavior decreases. According to the PPTA Class Size Taskforce [18], lower class size is anticipated to minimize teacher stress as behavior management issues are addressed, relationships with students improve, and academic achievements improve.
5. Teacher Professional Development: [9], the most crucial factor in making a shift or adapting to something new or challenging is a positive school learning culture. To do this, good leadership support is required, as it contributes to the creation of a learning environment. Schools must have a behavior plan that is viewed and reviewed on a regular basis. As a result, it merely goes to show how important it is for schools to ensure that every member of their staff, new or old, is aware of the school's standards in this area. Professional development is a great technique to empower instructors and inform them about the policy/mission statement for behavior management and learning. Furthermore, well-planned, successful professional development has the ability to strengthen teacher capacity to control physically hostile behavior [15]. Based on the discussions thus far, it is clear that the school plays an important role in managing behavior and promoting a learning environment in the life of a student. Schools, as stated by Pingge Roni [20], must nurture variety and assist children in reaching their full potential. They also

claimed that it is the responsibility of the school to provide resources to her teachers and to skill them through professional development in order for them to better deal with physical violent behaviors in the classroom and to guarantee that learning opportunities are provided to the students.

4. Discussions

4.1. Research Question 1: Support Service Available for Teachers in Managing Physical Aggressive Behaviours

Research question one (1) was to investigate the support service available for teachers in managing physical aggressive behaviours among children. One (1) to five (5) statements were put before respondents to either disagree or agree with the statement.

The data in Table 1 reveal responses to statement 1: centre has a policy for managing physical aggressive behaviours; 110 (91.7%) of teacher respondents disagreed while 10 (8.3%) of them agreed to the statement. The second statement: centre policy for managing physical aggressive behaviours is effective was disagreed by 118 (98.3%) of teacher respondents and only 2 (1.7%) of them agreed to the second statement. The third statement that respondents gave their responses to was: teachers receive support from school authorities in managing physical aggressive behaviours in their centres and 72 (60%) of teacher respondents disagreed and 48 (40%) of them agreed. Statement 4: teachers receive support from parents whose children put up physical aggressive behaviours in managing such children in their centres. The data show that, 106 (88.3%) of the teacher respondents disagreed while 14 (11.7%) of them agreed to the statement. The final statement in seeking teacher respondents' views regarding the support available for teachers in managing physical aggressive behaviours among children: formal training with/within the school for teachers in dealing with physical aggressive behaviours is available for teachers indicates that, 120 (100%) of teacher respondents disagreed and no respondent agreed to the statement.

Table 1. Support Service Available for Teachers in Managing Physical Aggressive Behaviours.

S/N	Statement	Scale	
		Disagree	Agree
	Centre has a policy for managing physical aggressive behaviours	110 (91.7%)	10 (8.3%)
	Centre policy for managing physical aggressive behaviours is effective	118 (98.3%)	2 (1.7%)
	Teachers receive support from school authorities in managing physical aggressive behaviours in their centres	72 (60%)	48 (40%)
	Teachers receive support from parents whose children put up physical aggressive behaviours	106 (88.3%)	14 (11.7%)

S/N	Statement	Scale	
		Disagree	Agree
	in managing such children in their centres		
	Formal training with/within the school for teachers in dealing with physical aggressive behaviours is available for teachers	120 (100%)	0 (0%)

Source: Filed Data, 2018

All ten (10) interviewees from the ten (10) circuits described management of physical aggressive behaviours as an on-going concern in their classrooms and throughout their centres. They recognized that the support from the management of their centres and from other teachers in their centres was of great importance in the process of managing physical aggressive behaviours. This does not mean however that the consequences are inequitable. Interviewees also looked up to the centres authorities who are responsible for the smooth running of the centres to step in for equitable procedures to be followed for all interventions regarding physical aggressive behaviours that may occur in their centres. The centres that the researcher carried out this study have a lot of commonalities in the execution and implementation of their physical aggressive behaviour management plan. Interviewees agreed that, they resort to (the centre) “stand down” procedures which are at the discretion of the headteacher when all other means are exhausted.

Interviewees also spoke at length about the need for unequivocal consequences and what these were when responding

to children who display physical aggressive behaviours, both in the classroom and in the playground, and against other persons or property.

4.2. Research Question 2: Effectiveness of Teachers Strategies in Dealing with Physical Aggressive Behaviours

The main purpose of research question four (4) was to investigate the effectiveness of teachers’ strategies in dealing with physical aggressive behaviours among children in early childhood educational centres were respondents teach. In line with this, a number of statements, thus one to five (1-5) were put before the respondents as shown in Table 2. Similarly, structured interview guide was used to collect data so as to address the same research question. Themes, direct quotes and explanations were used to analyse the qualitative data. Table 2 gives a summary of effectiveness of teachers’ strategies in dealing with physical aggressive behaviours among children;

Table 2. Effectiveness of Teachers Strategies in Dealing with Managing Physical Aggressive Behaviours.

S/N	Statement	Scale	
		Disagree	Agree
	Time out is an effective strategy in managing physical aggressive behaviours	2 (1.7%)	118 (98.3%)
	Verbal reprimand /motivations/gifts given to children is an effective management strategy of physical aggressive behaviours	3 (2.5%)	117 (97.5%)
	Receiving formal training by teachers is an effective management strategy in dealing with physical aggressive behaviours	3 (2.5%)	117 (97.5%)
	Building positive working relationships with children is an effective strategy in managing physical aggressive behaviours	0 (0%)	120 (100%)
	Setting rules and regulations for children to follow is an effective management strategy for teachers in dealing with physical aggressive behaviours	4 (3.3%)	116 (96.7%)

Source: Filed Data, 2018

The data show that only 3 (2%) teacher respondents disagreed while 150 (98%) of them did agreed to the statement;

time out is an effective strategy in managing physical aggressive behaviours. In statement 2: verbal reprimand

mand/motivations/gifts given to children are an effective management strategy of physical aggressive behaviours, only 4 (3%) of teacher respondents disagreed while 149 (97%) of teacher respondents agreed to the statement. In responding to the third statement: receiving formal training by teachers is an effective management strategy in dealing with physical aggressive behaviours, 18 (11.8%) of teacher respondents disagreed and 135 (88.2%) of them agreed to the statement. All one hundred and fifty-three (153) teacher respondents agreed to the fourth statement: building positive working relationships with children is an effective strategy in managing physical aggressive behaviours. In responding to statement 5: setting rules and regulations for children to follow is an effective management strategy for teachers in dealing with physical aggressive behaviours, 4 (3%) teacher respondents disagreed to the statement while 149 (97%) agreed to the statement.

With regards to the interview session, when questioned about effectiveness of teachers' strategies that are employ in managing physical aggressive behaviours.

5. Key Findings of the Study

5.1. Conclusion

The researcher concluded that, formulation of policies and procedures by the Bolgatanga Municipality in the Upper East Region, Ghana by engaging all stakeholders in the education early childhood children in the municipality, such as;

- 1) Knowledge of children development
- 2) Knowledge of the that causes or triggers of physical aggressive behaviours among children
- 3) Training of early childhood education teachers

5.2. Recommendations

From this study, it is clear that there is no evidence of policies in place to address physical aggressive behaviours in early childhood centres. It is recommended that various stakeholders spearhead by Ghana Education Service meet to put in place a discipline or behaviour management plan which will outline various strategies/interventions or chain of events in dealing with physical aggressive behaviours as they may occur.

It is recommended that headteachers/ mistresses encourage peer tutoring by assigning teachers to work with each other. The sustained management of physical aggressive behaviours at early childhood education centres would not be possible if headteachers/ mistresses do not support teachers. Teachers cannot work in isolation; therefore, it is imperative that headteachers take up their responsibilities as effective leaders by ensuring that teachers get all the support needed in dealing with physical aggressive behaviours in their centres.

On-going training and professional development should be sought by headteachers/mistresses to gain newer insights, to

share strategies/interventions as to trends in physical aggressive behaviours management so that this information can be disseminated to teachers thus empowering them to be more effective in managing the outburst it among children in their centres.

From the perceptions shared by teachers in the study it seemed that training and professional development is not paid particular attention. In realizing this possibility, it is recommended that headteachers/mistresses organize on-going training and professional development in child psychology and alternative behaviour management techniques and classroom management skills be operationalized and identified on the centres' calendar of events. This can be conducted at the level of the centre. Headteachers should encourage greater parental involvement in their centres by including parents in the formulation of policies and a behaviour management plan to deal with the issue of physical aggressive behaviours. In addition, parental involvement should be enhanced at centres through regular parenting meetings/seminars to alert parents on the issues of child development and management of physical aggressive behaviours so that the home and school collaboration can be strengthened.

The successful implementation and further institutionalization of these recommendations demand that teachers, headteachers/mistresses, parents and the Municipal Education Directorate work harmoniously in developing policies in dealing with physical aggressive behaviours and to ensure that all centres are carefully monitored, thus ensuring that children achieve their maximum potential.

Author Contributions

Thomas Nyaabila Abugre: Conceptualization, Data curation, Funding acquisition, Investigation, Methodology, Resources, Writing - original draft, Writing - review & editing

Michael Subbey: Conceptualization, Data curation, Investigation, Methodology, Resources, Writing - original draft, Writing - review & editing

Nurudeen Iddriss Muhammed: Conceptualization, Data curation, Methodology, Resources, Writing - original draft, Writing - review & editing

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] Amstad, M., & Christoph Michael Müller. (2020). Students' Problem Behaviors as Sources of Teacher Stress in Special Needs Schools for Individuals With Intellectual Disabilities. *Frontiers in Education*, 4.
- [2] Bhat, A. (2018, August 23). *Descriptive Research: Characteristics, Methods + Examples*. QuestionPro.

- [3] Bronfenbrenner, U. (1979). *The ecology of human development: Experiments in nature and design*. Cambridge, MA: Harvard University Press.
- [4] Cain, C. (2022, March 5). *Helping Your Child Feel Safe & Secure*. Holt International. <https://www.holtinternational.org/helping-your-child-feel-safe-secure/>
- [5] Dereli, E. (2020). Physical and Relational Aggressive Behavior in Preschool: School Teacher Rating, Teachers' Perception and Intervention Strategies. *Journal of Educational Issues*, 6(1), 228.
- [6] Downey, C., & Crummy, A. (2022). The impact of childhood trauma on children's wellbeing and adult behavior. *European Journal of Trauma & Dissociation*, 6(1), 100237-100237.
- [7] Habibat Abubakar Yusuf, & Ismail Hussein Amzat. (2020). School Climate and Its Impact on School Development in Nigeria. *Oxford Research Encyclopedia of Education*.
- [8] Hassan, M. (2023, August 15). *Descriptive Research Design - Types, Methods and Examples*. Research Method.
- [9] Ismail, S. M., Rahul, D. R., Patra, I., & Ehsan, R. (2022, September 13). *Formative vs. summative assessment: impacts on academic motivation, attitude toward learning, test...* ResearchGate; Springer Nature.
- [10] Kiro, C. (2007). *Interview by Steve Braunias of Cindy Kiro*. New Zealand Commissioner for Children, published in Sunday Star Times, 5 August, p. A18.
- [11] Leyba, V. (2021). *Early Childhood Teachers' Well-Being: What We Know and Why We Should Care*. ZERO to THREE.
- [12] Li, S., Yu, & Zheng, Y. (2023). How the home learning environment contributes to children's social-emotional competence: A moderated mediation model. *Frontiers in Psychology*, 14.
- [13] McCombes, S. (2019, May 15). *Descriptive Research | Definition, Types, Methods & Examples*. Scribbr.
- [14] McMillan, J. H., & Schumacher, S. (2005). *Research in education*. (5th ed). New York: Addison Wesley Longman, Inc.
- [15] Merlo, A. (2022, February 19). *How Teachers Can Improve Their Performance in the Classroom*. Europass Teacher Academy.
- [16] Mitchell, M., Newall, F., & Nataraja, R. M. (2022). Teaching Aggression Management Skills. *Springer EBooks*, 1-22.
- [17] Monteiro, V., Carvalho, C., & Natalie Nôrega Santos. (2021). Creating a Supportive Classroom Environment Through Effective Feedback: Effects on Students' School Identification and Behavioral Engagement. *Frontiers in Education*, 6.
- [18] NZPPTA (2005). *Class Size, Educational Performance and Teacher Workload: A Report to the NZPPTA Annual Conference 2005*. NZPPTA, Wellington.
- [19] Piaget, J. (1969). *Psychologie and Pédagogie*. [Psychology and pedagogy]. Paris: Deno & Gonthier.
- [20] Pingge Roni. (2014). *Effective Teaching in Schools (Theory and Practice)*. Academia.edu. https://www.academia.edu/42210871/Effective_Teaching_in_Schools_Theory_and_Practice_
- [21] Ranga Dewati Suryaningrat, Maryam, F., & Riantoputra, C. D. (2020). Teachers' aggressive behaviors: what is considered acceptable and why? *Heliyon*, 6(10), e05082-e05082.
- [22] Reedtz, C. (2020). *Examining the Incredible Years Teacher Classroom Management Program in a Regular Norwegian School Setting: Teacher-Reported Behavior Management Practice, Problem Behavior in Classroom and School Environment, Teacher Self- and Collective Efficacy, and Classroom Climate - Merete Aasheim, Sturla Fossum, Charlotte Reedtz, Bjørn Helge Handegård, Monica Martinussen, 2020*. SAGE Open.
- [23] Saunders, L., & Wong, M. A. (2020, August). *Learning Theories: Understanding How People Learn*. Illinois.edu; Windsor & Downs Press.
- [24] Schneider, S., & Sanguinetti, A. (2021). Positive reinforcement is just the beginning: Associative learning principles for energy efficiency and climate sustainability. *Energy Research and Social Science*, 74, 101958-101958.
- [25] Skinner, B. F. (1974). *About behaviourism*. London: Jonathan Cape.
- [26] Tam, S. (2016, February). *Helping Young Children Channel Their Aggression*. ZERO to THREE.
- [27] Thompson, P. (2019, August 15). *3.1 Behaviorist Theories of Learning*. Okstate.edu; Oklahoma State University Libraries.
- [28] Tiina Kivirand, Äli Leijen, & Lepp, L. (2022). Enhancing Schools' Development Activities on Inclusive Education Through In-service Training Course for School Teams: A Case Study. *Frontiers in Psychology*, 13.
- [29] Turanovic, J., & Siennick, S. (2022). *The Causes and Consequences of School Violence: A Review*. <https://www.ojp.gov/pdffiles1/nij/302346.pdf>
- [30] Vygotsky, L. S (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- [31] Vygotsky, L. S. (2004). *The essential Vygotsky*. New York: Kluwer Academic.
- [32] Wang, D., & Fawzi, W. W. (2020). Impacts of school feeding on educational and health outcomes of school-age children and adolescents in low- and middle-income countries: protocol for a systematic review and meta-analysis. *Systematic Reviews*, 9(1).
- [33] Watson, J. B. (1913). Image and affection in behaviour. *Journal of Philosophy, Psychology and Scientific Methods*, 10, 421-428.
- [34] Wertsch, J. (1991). *Voices of the mind: A sociocultural approach to mediated action*. Cambridge: Harvard University Press.

- [35] Xu, S., Sun, Y., Huang, M., Huang, Y.-H., Han, J., Tang, X., & Wang, R. (2021). Emotional State and Feedback-Related Negativity Induced by Positive, Negative, and Combined Reinforcement. *Frontiers in Psychology*, 12.
- [36] Yelkpiri, D., Namale, M., Esia-Donkoh, K., & Ofosu-Dwamena, E. (2012). *Effects of Large Class Size on Effective Teaching and Learning at the Winneba Campus of the UEW*.