

## Learners' Conduct and Educational Achievement

Hennie Joy M. Maldo<sup>1</sup>, Richard M. Oco<sup>2</sup>

<sup>1,2</sup>Southern de Oro Philippines College, Cagayan de Oro City, Philippines



**ABSTRACT:** Learners' conduct may be taken from several factors which may be the cause for their educational achievement. This study aimed to determine the level of learners' conduct and educational achievement. This also determined the relationship between the learners' conduct and educational achievement. The respondents of this study were the teachers (n=105) from the selected schools in the Division of Cagayan de Oro City. This study used descriptive correlational research design with documentary analysis and utilized an adapted and modified survey questionnaire as its instrument to gather the data from respondents. Statistical tools like frequency and percentage, mean and standard deviation, Pearson Product Moment Correlation Coefficient were used to find out the relationships between the variables. Results showed that the learners' conduct was at moderate level on which family has the highest mean score while teacher has the lowest mean score. Learners' educational achievement was at a satisfactory level. Learners' conduct was negatively correlated with educational achievement. Though negatively correlated but it can be concluded that family plays an important role in molding learners' conduct. Thus, the school may hold parenting seminars to remind parents of the importance of family in developing the learners' conduct. If learners have desirable conduct, they would have good study habits that would improve their educational achievement.

**KEYWORDS:** Educational Achievement, Family Factor, Learners' Conduct

### I. INTRODUCTION

Behavior or conduct refers to how a person or an entity acts or responds in a specific circumstance. It is the observable and quantifiable behaviors conduct, responses, and activity patterns displayed by people or groups. A wide range of elements, including as heredity, environment, and learning, can have an impact on conduct.

According to Crowder (2022), "Conduct is any activity which can be observed, recorded and measured, this includes first what living beings or organism's do- that is their movement in space." A person's conducts or behaviors in response to an internal or external stimuli condition are referred to as their behavior. When one is aware of what motivated or drove his conduct, one can better understand it. When one accepts or disapproves behavior, one evaluates it. A typical response that includes both comprehension and evaluation is a common reaction that individual engages daily.

As children grow and develop, their behavior becomes more nuanced and multifaceted. Children's conduct is a reflection of their changing needs and understanding of the world. As they grow and mature, they learn to control their impulses and to behave in ways that are appropriate for their age and situation. Children's conduct can also be influenced by their emotions. When they are feeling happy, sad, angry, or scared, their conduct may change.

Disruptive conduct in children refers to conducts or behaviors that occur when a child has difficulty controlling their actions. This is often in social settings and can happen for many different reasons. Disruptive conduct is roughly defined as inappropriate behavior of learners in the classroom that impedes both learning and teacher's instructions (Gómez et al., 2018; Närhi et al., 2017). Some of the most common disruptive conduct include learners' inappropriate gestures, talking with classmates, physical and verbal aggressiveness, moving in the class, shouting, and not respecting the classroom rules.

Fact that disruptive conduct in the classroom is an undeniable problem faced by teachers of all generations (Abeygunawardena & Vithanapathirana, 2019), many research studies have been carried out investigating the causes of this disruptive conduct and developing possible intervention strategies (Rafi et al., 2020). Teachers, academic staff, and mental health

## Learners' Conduct and Educational Achievement

professionals are increasingly concerned due to the incidence of disruptive conduct in primary schools. The amount of time teachers spends correcting and redirecting conduct may have an impact on how well other learners behave in the classroom.

When face-to-face classes resumed after pandemic, teachers were facing a really challenging academic year, not only because of poor performance of learners academically but the conduct as well. Teachers are being challenged because of the conduct of the learners. The learning pace of the learners were lessened because the class is disrupted due to this learners' disruptive conduct. The teachers could not continue teaching. Learners have different backgrounds and by understanding some of the factors that can explain why learners misbehave, teachers and leaders can take steps to improve learners' behavior and minimize disruptions to learning.

This study is anchored on the theories of Pavlov on behaviorism. Behaviorism focuses on how people behave. In the field of education, behaviorism examines how learners behave through learning. More specifically, behaviorism focuses on observing how learners respond to certain stimuli that, when repeated, can be evaluated, quantified, and eventually controlled for everyone. The emphasis in behaviorism is on that which is observable and not on the mind or cognitive processes. In sum, if one cannot observe it, it cannot be studied. The development of behaviorism is frequently associated with Ivan Pavlov, famous for his experiments with dogs, food, and audible stimuli, such as a bell. In his experiments, dogs learned to associate food or feeding time with the sound of the bell and began to salivate. Pavlov conducted his experiments in the early 1900s and they were replicated by many other researchers throughout the 20th century (McLeod, 2017).

John B. Watson, among the first Americans to follow Pavlov's work, saw it as a branch of natural science. Watson became a major proponent of Pavlov and is generally credited with coining the term behaviorism. He argued that mind and consciousness are unimportant in the learning process and that everything can be studied in terms of stimulus and response. Other major figures associated with behaviorism are B.F. Skinner and Edward Thorndike. Skinner is particularly well known, primarily because he introduced what he referred to as operant conditioning which emphasized the use of both positive and negative reinforcement to help individuals learn new behaviors.

This was quite different from Pavlov, who relied on simple reflexive responses to specific stimuli although both Pavlov and Skinner promoted repetitive behavior that leads to habit formation. These proponents have significant impact on various educators on the development of modular distance learning approaches. The delivery of the instructional model of this research were patterned on these theories and educators and realigned with the current state or level of understanding and learning capacity of learners under this study.

The study of Alcalá (2021) revealed that behaviorism is still significant in today's teaching and learning process, however it must be aligned with the current learning needs and styles of learners. Thus, using a theory in the teaching and learning process needs enhancements and modifications to make it more useful and effective. This was seen on the study of Fidalgo (2020) who revealed that behaviorism plays a vital role in child's development. To make it more effective it must be accompanied with the use of technologies available that can make learning aligned with the current trend in education.

## II. METHODOLOGY

The researcher used descriptive correlational research design with documentary analysis to attain the objectives set in this study. The descriptive correlational design investigates relationships between variables without the researcher controlling or manipulating any of them (Bhandari, 2021). It is a design in which the researcher is primarily interested in describing relationships among variables without seeking to establish a connection. It also aims to accurately and thoroughly describe a population, situation, or phenomenon. It can answer the questions of what, where, when, and how, but not why. Furthermore, a descriptive research design can investigate one or more variables using a variety of research methods.

## III. RESULTS AND DISCUSSION

**Problem 1.** What is the level of learners' conduct in the classroom based on the following factors:

- 1.1 peer;
- 1.2 individual;
- 1.2 family;
- 1.4 school; and
- 1.5 teacher?

## Learners' Conduct and Educational Achievement

**Table 1: Overall Learners' Conduct**

Variables	Mean	SD	Description	Interpretation
Peer Factor	3.49	0.59	Often	High
Individual Factor	3.30	0.60	Sometimes	Moderate
Family Factor	3.55	0.58	Often	High
School Factor	3.07	0.58	Sometimes	Moderate
Teacher Factor	2.36	0.57	Seldom	Low
<b>Overall Mean</b>	<b>3.15</b>	<b>0.58</b>	<b>Sometimes</b>	<b>Moderate</b>
<b>Note:</b>	4.21 – 5.00 Very High	3.41 – 4.20 High	2.61 – 3.40 Moderate	
	1.81 – 2.60 Low	1.00 – 1.80 Very Low		

Table 1 presents the overall level of learners' conduct. It registered an overall Mean of 3.15 and SD= 0.58 described as Often and interpreted as Moderate Level. Moreover, the variables were rated as either low, moderate and high level respectively. The data imply that there are various factors that could influence learners' conduct. This means that some factors may influence from internal and external to the learners. Thus, guidance and understanding from the school administrator, teachers and parents can create a learning environment that caters diverse needs, foster positive behavior and ultimately promotes effective learning to the learners.

As highlighted by Ardin's research (2017) on disruptive conduct is influenced by internal and external factors. Seeking attention is an internal factor while factors come from classmates, close friends, the learning environment, family, and society are called external factors. Teachers and parents should work together to address these various factors. It can create a supportive learning environment that encourages positive conduct and allow learners to thrive.

In the same table, the highest rated variable is Family factor with the Mean of 3.55 and SD=0.58, described as Often and interpreted as High. This data implies that family-related influences, play a significant role in shaping learners' conduct and classroom conduct. This influence can be a positive or negative, depending on the various aspects of the family dynamic. This further indicates that family factor is a strong influence to learner's conduct and learning environment.

Bennett (2018) when a child misconducts or fails to meet expectations at school, the child's home and family life should be considered. Several family factors can affect a child's behavior and ability to perform in the classroom. These include economic stability, changes in family relationships, parental attitudes toward education and incidents of child abuse. Moreover, teachers and parents should collaborate and have constant and positive communication that can create a strong support system that benefits the learner.

Meanwhile, the lowest rated indicator is Teacher factor with the Mean of 2.36 and SD=0.57 described as Seldom and interpreted as Low. The data imply that while Teacher Factor received the lowest rating, it is still important for educators to reflect on their conduct and instructional practices to create a positive classroom environment. The disruptive conduct of learners can be influenced by teacher factors, which have the ability to both increase and decrease disturbances in the classroom. Teachers have a huge impact to learning environment. Reflecting on their own practices could really create an environment wherein learners feel engaged and supported, reducing the likelihood of disruptive conduct.

One aspect that may contribute to the issue of disruptive learners is the behavior of teachers conduct within the classroom. Addressing issues such as ineffective teaching methods, lack of preparation, and negative interactions with learners can help reduce instances of disruptive conduct and enhance the overall learning experience. Thus, it is important that the teachers contemplate on their actions and build rapport with the learners by showing genuine interest in the lives of the learners (Handayan et al., 2020)

### **Problem 2. What is the learners' level of educational achievement based on School Year 2022 – 2023?**

Table 2 presents the Learners' Overall Educational Achievement based on school year 2022-2023. It registered an overall Mean of 84.19 and SD= 2.13 which indicates a satisfactory level of educational achievement. The data imply that learners achieving satisfactory grades might be flying under the radar while actually struggling due to disruptive behavior. This means that even though they are getting satisfactory grade, they might be capable of much more if they could focus and avoid disruptions. This there is a strong link between the disruptive conduct and educational achievement. Thus, guidance from teachers and parents are needed.

## Learners' Conduct and Educational Achievement

**Table 2: Learners' Overall Educational Achievement**

Level of Academic Performance	Frequency	Percentage	Mean	SD
Outstanding	59	5		
Very Satisfactory	398	34	<b>84.19</b>	<b>2.13</b>
Satisfactory	574	49		
Fairly Satisfactory	141	12		
Did Not Meet Expectations	0	0		
<b>Total</b>	<b>1172</b>	<b>100.00</b>		

**Note:** 90-100 Outstanding 85 – 89 Very Satisfactory 80 – 84 Satisfactory  
75 – 79 Fairly Satisfactory 74 & below Did not Meet Expectations

Learners with low educational achievement or struggling with their studies must be given attention by the teachers and eventually their parents. They need extra time, attention, assistance and guidance. Teachers and parents may collaborate with each other so that the set of activities and the lessons taken at school will have concrete follow up when the learners are at home. Learning must have recollection and re-enforcement at home for better understanding, familiarization and memory.

As highlighted by The Program for International Learner Assessment (PISA), Cahu and Quota (2019) found a correlation between learners' reports of disruption and their educational achievement. The scores are lower when there are more disruptions. Teachers and parents should be working together in guiding and reminding these learners to focus more and to lessen disruptive conduct.

Moreover, Oco and Comahig (2023) stated that teachers' efforts on providing assistance to learners through interventions and remediations with the support and guidance of parents or family members have significantly impacted the learners' improvement in their educational achievement. Learners further behave well as they are aware that their misconduct can be reported to their parents and they also feel secure and confident knowing that they can ask for help from their parents or siblings about their struggles in their studies.

### **Problem 3. Is there a significant relationship between the factors that influence the learners' conduct in the classroom and their educational achievement?**

**Table 3: Test Correlation on Factors Affecting Learners' Disruptive Conduct and educational achievement**

Variables	r-value	p-value	Level of Correlation	Decision	Interpretation
Peer Factor	-0.539	0.001	Moderate Negative Correlation	Reject Ho	Significant
Individual Factor	-0.328	0.013	Low Negative Correlation	Reject Ho	Significant
Family Factor	-0.635	0.001	Moderate Negative Correlation	Reject Ho	Significant
School Factor	-0.375	0.016	Low Negative Correlation	Reject Ho	Significant
Teacher Factor	-0.361	0.003	Low Negative Correlation	Reject Ho	Significant

**Note:** Correlation is significant at 0.05 level (2-tailed)

Table 3 shows the test correlation on between learners' conduct and educational achievement. For Peer Factor, it registered a computed r-value of -0.539 with computed p-value of 0.001. The computed p-value is less than the p-critical value of 0.05 level of significance. This implies that significant moderate negative correlation between learners' disruptive conduct and educational achievement was established when peer factor is taken into consideration. Thus, the null hypothesis is rejected. Peer influence to a learner is imminent as they are in the stage of development wherein, they still do not have fixed things to believe and follow and they are still searching for a person or group to belong to. It is important that parents and teachers should help in guiding the learners in their activities with their peers.

Learners' learning and emotional health can be negatively impacted by negative peer interactions. This is due to the fact that they will encounter unfavorable attitudes and behaviors. Sometimes it is too late once they realize it. In addition to improving overall academic results, fostering a supportive peer environment can assist decrease disruptive conducts. Consequently, it is critical that the community as a whole keep an eye on the learners' actions and develop initiatives and programs that will help them focus on doing good deeds and divert their attention (Panikar and Silva).

For Individual factor, it registered a computed r-value of -0.328 with computed p-value of 0.013. The computed p-value is less than the p-critical value of 0.05 level of significance. This implies that significant low negative correlation between learners'

## Learners' Conduct and Educational Achievement

disruptive conduct and educational achievement was established when individual factor is taken into consideration. Individual factor of learners' conduct affects their educational achievement as they are the one that will decide on which they will take and consider in using and following. Parents and teachers may guide and assist the learners specially on the concept of good and bad conduct and activities. Learners needs assistance in making decisions as they are still not that experienced in making hard decisions.

Rauch (2021) has drawn attention to the fact that learners who experience mental health problems—such as anxiety disorders—may also exhibit poor classroom conduct. Teachers need to be aware of this because there's a possibility that a pupil behaves differently at home and at school. Additionally, parents and teachers should supervise and manage their learners' behavior, particularly if you notice that the learner is acting inappropriately.

For Family Factor, it registered a computed r-value of -0.635 with computed p-value of 0.001. The computed p-value is less than the p-critical value of 0.05 level of significance. This implies that significant moderate negative correlation between learners' disruptive conduct and educational achievement was established when family factor is taken into consideration. Family factor of learners' conduct affects their educational achievement. Activities or situations within the family affects the conduct and mode of the learner. It can be in positive way or in the negative side. Learners need assistance on this matter so that they can better understand on why those things happened and what they can do to minimize the impact towards them.

A learner's conduct and educational achievement in the classroom can be impacted by a number of family problems, such as financial hardships, illness, and, in the worst cases, child labor or abuse. As a result, in some cases, schools may need to provide extra assistance to children in order to help them with their problems. This assistance may include counseling or even just talking to parents about how their activities at home are affecting their learners (Bennett, 2018; Silva, 2020).

For School Factor, it registered a computed r-value of -0.375 with computed p-value of 0.016. The computed p-value is less than the p-critical value of 0.05 level of significance. This implies that significant low negative correlation between learners' disruptive conduct and educational achievement was established when school factor is taken into consideration. School factor on learners' conduct affects their educational achievement. The school is the learners' second home. It is the place where they encounter and socialize more time with learners of their same age or generation. The environment that the school have will affect the learners' behavior and eventually their educational achievement.

According to Yussif (2021), improving communication and the connections between teachers and learners may be able to help with this problem. It might be an effective strategy for dealing with problems like disruptive kids or absenteeism from class because of inadequate follow-up. Thus, developing relationships and open lines of communication between teachers and learners promotes belonging and trust. As a result, learners might feel more upbeat and productive in the classroom and be more motivated to succeed.

For Teacher factor, it registered a computed r-value of -0.361 with computed p-value of 0.003. The computed p-value is less than the p-critical value of 0.05 level of significance. This implies that significant low negative correlation between learners' disruptive conduct and educational achievement was established when teacher factor is taken into consideration. Teacher factor on learners' conduct affects their educational achievement. The teacher is the learners' second parent and the best instructional materials for learning. Learners tend to imitate them as they admire and idolizes them. Whatever the teachers do they are observed, followed and even copied by the learners.

According to Dulay and Karadag (2020), despite instructors' activities having an impact on learning and motivation, learners are frequently depicted as the cause of disruptive conduct. This highlights the difficulty of attributing disruptive conduct to teacher actions alone. Learners' motivation and, eventually, behavior might be influenced by the activities of their teachers.

## IV. CONCLUSIONS

Based on the data presented, the following conclusions were revealed:

1. Family is important in molding learners' conduct. Other factors may influence learners' behavior, but family is the most essential factor in creating the behavior of a child.
2. Educational achievement of learners needs improvement. It needs the support of family and teachers.
3. Though learners' conduct is negatively correlated to educational achievement, it still needs to consider the development of the learners' conduct because if a child has a good conduct, he would also have good study habits that help improve his educational achievement.

## V. RECOMMENDATIONS

The following are the formulated recommendations based on findings and conclusions.

## Learners' Conduct and Educational Achievement

1. Teachers and parents may communicate consistently to guide and address learners' conduct. The school may provide parenting seminars to remind parents the importance of family in developing children's behavior.

2. Teachers and parents may collaborate to create support services or group to address individual learner's needs and create a supportive learning environment that can address their struggles and improve their educational achievement.

3. Parents/Guardians may actively engage in school activities to support their children's educational achievement and most importantly their conduct or behavioral development. Parents/Guardian can enhance communication with teachers and provide a supportive home environment to positively impact conduct and educational achievement.

5. Future researchers can conduct longitudinal studies to track the long-term effects of family and peer factors and as well as other factors that may affect the learners' educational achievement to further provide valuable insights for future interventions.

## REFERENCES

- 1) Alcalá, M. (2021). Modular distance learning modality: Challenges of teachers in teaching amid the covid-19 pandemic. *International Journal of Scientific Research in Education*, 10(3). Retrieved from <https://doi.org/10.5861/ijrse.2021.602>
- 2) Ardin, H. (2020). Factors causing learners' disruptive behavior in learning English: A case study. *International Journal in Applied Linguistics of Parahikma*, 2(1), 9–17. Retrieved from <https://journal.parahikma.ac.id/ijalparahikma/>
- 3) Bektiningsih, B., Fauzati, E., Prastiwi, Y., & Rahmawati, L. E. (2023). Factors causing disruptive behavior of learners in the classroom: a case study in elementary school. In *Advances in social science, education and humanities research* (pp. 369–377). [https://doi.org/10.2991/978-2-38476-086-2\\_3](https://doi.org/10.2991/978-2-38476-086-2_3)
- 4) Bhandari, P. (2023, June 22). *Correlational Research | When & How to use*. Scribbr. <https://www.scribbr.com/methodology/correlational-research/>
- 5) Cahu, P., & Quota, M. (2019). Does school safety and classroom disciplinary climate hinder learning? Evidence from the MENA region. Policy research working paper, no. WPS 8822. Washington, DC: World Bank. Retrieved from <http://documents.worldbank.org/>
- 6) Edinyang, S. D. (2017). Maintaining discipline in a social studies classroom. *International Journal of Sociology and Anthropology Research*, 3(2),54-60. <https://www.eajournals.org>
- 7) Fidalgo, P. (2020). Learners' perceptions on distance education: A multinational study. <https://www.researchgate.net/publication>
- 8) Gallegos, A. G., Gómez-López, M., Extremera, A. B., & Martínez-Molina, M. (2019). Interaction Effects of Disruptive Behaviour and Motivation Profiles with Teacher Competence and School Satisfaction in Secondary School Physical Education. <https://doi.org/10.3390/ijerph17010114>
- 9) Goel, P. (2023, February 20). Family conflict and its effect on children. *Times of India*. <https://timesofindia.indiatimes.com/>
- 10) Gomez Marmol et.al., (2018). Classroom to Reduce Learner Disruptive Behavior: An Action Research. <https://www.researchgate.net/publication/359043459>
- 11) Jurado P., Tejada J. (2019). Disrupción y fracaso escolar. Disruption and school failure. A study in the context of secondary compulsory education in Catalonia. doi: 10.15581/004.36.135-155.
- 12) Kaplan, D. (2018). Behaviorism in online teacher training. *Scientific Publications*, 9(4): 570-577. Retrieved from <https://doi.org/10.4236/psych.2018.94035>
- 13) Laily, Hawa Handayani, Syamsul Ghufron, Suharmono Kasiyun. (2020). Perilaku Negatif Siswa: Bentuk, Faktor Penyebab, dan Solusi Guru dalam Mengatasinya. <https://journal.upy.ac.id/index.php/es/article/view/760>
- 14) Laursen, B., & Veenstra, R. (2021). Toward understanding the functions of peer Influence: A summary and synthesis of recent empirical research. *Journal of Research on Adolescence*, 31(4), 889-907. *Journal of Research on Adolescence*, 31(4), 889–907. <https://doi.org/10.1111/jora.12606>
- 15) Lumadi, R. I. (2019). Taming the tide of achievement gap by managing parental role in learner discipline. *South African journal of Education*,39(Supplement 1), S1-S10. <https://doi.org/10.15700/saje.v39ns1a1707>
- 16) Mbbs, K.K. (2022). What are the types of disruptive behavior? Classroom examples.MedicineNet. [https://www.medicinenet.com/what\\_are\\_the\\_types\\_of\\_disruptive\\_behavior/article.htm](https://www.medicinenet.com/what_are_the_types_of_disruptive_behavior/article.htm)
- 17) Mcleod, S. (2017). Behaviorist approach. *SP Journal Publications*, (10). Retrieved from <https://www.simplypsychology.org>



## Learners' Conduct and Educational Achievement

- 18) Muna, F. (2020). Factors contributing to disruptive classroom behaviour in Brunei Darussalam. *ResearchGate*. <https://doi.org/10.13140/RG.2.2.22567.16809>
- 19) Noeth-Abele, Christine, "Disruptive Learner Behavior: The Effects on Various Constituent Groups in Large Suburban School Communities" (2020). Education Doctoral. Paper 456.
- 20) Oco, Richard M. (2023). Social Development and Volunteerism of Current Generation: An Inquiry. *International Journal of Research Publications*. DOI : [doi:10.47119/IJRP10013911220235801](https://doi.org/10.47119/IJRP10013911220235801)
- 21) Oco, R. M., & Comahig, A. G. (2023). Synchronous, Asynchronous and Modular Distance Learning: Effects on Learners' Mathematics Performance. *Asian Research Journal of Mathematics*, 19(6), 84–102. <https://doi.org/10.9734/arjom/2023/v19i6669>
- 22) Panikar, D. (2023, December 2). *Factors Influencing Learning*. <https://devikapanikar.com/factors-influencing-learning/>
- 23) Plus, S. (2022, August 27). *Behavior Definition & Explanation | Sociology Plus*. Sociology Plus. <https://sociology.plus/glossary/behavior>
- 24) Rauch, C. (2021, December 16). *The factors affecting learner behavior*. Evidence Based Education. <https://evidencebased.education/>
- 25) Sayed, A. (2023, August 4). Human Behavior: Classification, Characteristics and Causation-Textile Apex. <https://textileapex.com/>
- 26) Silva, V. (2021, March 25). *8 Factors that Affect Learners' Motivation in Education*. <https://www.linkedin.com/pulse/8-factors-affect-learners-motivation-education-vitor-silva>
- 27) Syakarofath, N. A., & Subandi, S. (2019). Faktor ayah dan ibu yang berkontribusi terhadap munculnya gejala perilaku disruptif remaja. *Jurnal Psikologi*, 18(2), 230. <https://doi.org/10.14710/jp.18.2.230-244>.
- 28) Unlu, V. (2022, March 23). *Managing disruptive behaviour in the classroom | Cambridge English. World of Better Learning | Cambridge University Press*. <https://www.cambridge.org/elt/blog/2017/12/11/managing-disruptive-behaviour-in-the-classroom>
- 29) Van den Berg, Y. H. M., & Stoltz, S. (2018). Enhancing social inclusion of children with externalizing problems through classroom seating arrangements: A randomized controlled trial. *Journal of Emotional and Behavioral Disorders*, 26(1), 31-41. doi:10.1177/1063426617740561
- 30) Wangdi, T., & Namgyel, S (2022). Classroom to Reduce Learner Disruptive Behavior: An Action Research. <https://www.researchgate.net/publication/359043459>
- 31) Yussif, R. (2023). Causes of disruptive behavior in the classroom. Classroom Management expert. *Classroom Management Expert*. <https://classroommanagementexpert.com>
- 32) Zhang, J. (2019). The relationship between math anxiety and math performance: A meta-analytic investigation. *Frontiers in Psychology*, 10. Retrieved from <https://doi.org/10.3389/fpsyg.2019.01613>



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.