

## The Impacts of Reward-based Behaviour Systems on First-year Primary School Students in Hong Kong

Lee Ross

### Abstract

This action research project aimed to compare the behaviour of Year 1 students in Hong Kong as more reward-based behaviour systems were applied to the class. These students had mostly been subjected to Zoom classes throughout their education since the start of the Covid-19 pandemic, thus leading to them have only a narrow foundation of how to behave from their short time experiencing face-to-face classes in kindergarten. This project used Lewin's (1946) spiral model for educational action research and as each cycle passed, stricter and more rewarding methods were used to see how the students' behaviour developed over time. Through the action research project, it became clear that as more positive reinforcement was used, students were more likely to respond better than when less positive reinforcement was being used. This also appears to yield more continuity of positive behaviour, particularly amongst the low-level disruptors.

### Introduction

In the past few years, during the Covid-19 pandemic, it has been observed among teachers and parents alike that a lack of formal face-to-face schooling has disrupted students' cognitive ability and knowledge of how to behave appropriately, or at least what was considered to be appropriate for students of the same age pre-pandemic (McGuinness, 2020; Christner et al, 2021; Singh et al, 2020). Therefore, this action research project will focus on students who are transitioning from kindergarten to primary school, as these students are most likely to have experienced the adverse effects of the instability caused by school closures and subsequent disruptions in formal face-to-face teaching and learning (Dome et al, 2021; Christener et al, 2021). However, the aim of this research project is not to compare the differences between pre- and post-pandemic cognitive ability and classroom behaviour, but rather to test a range of behaviour management systems that can effectively and adequately deter students from being disruptive and influencing the overall classroom management and environment. This will be done by attempting to "resume" or "restart" good and positive behaviour amongst students by getting the students to essentially "relearn" or be "re-taught" how to behave appropriately through positive reinforcement within a classroom (Rafi et al, 2020; NCII et al, 2020; CPBIS et al, 2020). By doing this, it will not only be beneficial to the researcher of this action research project, but to their colleagues and, more importantly, to the students who will benefit greatly from less disruption within the classroom.

In this research project, the researcher will use three different behaviour management systems, following a cyclical action research model, to see how the behaviour of these students changes with the implementation of these different systems over time (Lewin, 1946; Burnes, 2020). Although these systems might not work within all classes, it is worth trialling them to see whether they can influence students' behaviour for those who have limited experience of being in a formal classroom setting. The first system used, although not explicitly a behaviour management system, will be random selection participation by drawing students' names out of a hat. The reasoning behind this rather than other methods is to ensure that students' behaviour can be observed before the implementation of any sort of behaviour management system (Hojnoski et al, 2018). Secondly, the researcher will ensure that students' participation is only rewarded to those whose who are following the rules set out by the researcher - that is, sitting properly, raise hands before talking, etc. - to ensure that the students get some idea of how to follow the basic classroom rules that every classroom environment will generally have. Finally, a monthly, reward-based tick chart will be used by the researcher, where students are rewarded with a tick for each lesson they behave well and upon

reaching certain milestones, students will be rewarded with different rewards such as stickers, sweets, small gifts, and star of the month certificates, providing they reach the required number of ticks for each milestone. However, if students do not behave well, they will have their names written on the whiteboard and lose their tick for that lesson, thus restricting the students' chances of reaching the milestones for prizes.

The aforementioned cycles will vary in length to ensure that students' attention to learning has minimal disruption due to bad behaviour. The first cycle, with no formal behaviour management, will be restricted to one week, while the second cycle will be two weeks and the final cycle will be a month to ensure that the monthly behaviour chart with weekly and a monthly milestone can be completed in full. Therefore, all three cycles of this research will total seven weeks.

The researcher's preliminary expectations of the action research align with current research. This research suggests that more formal and stricter behaviour management systems that incorporate a lot of positive reinforcement through praise and rewards are likely to yield better behaviour from most students within a specific classroom (Caldarella, 2020; Pajarillo-Aquino, 2019). It is also worth mentioning that within any classroom teachers may also find that student-specific behaviour systems are required for those who are particularly responsible for classroom disruptions (Gage et al, 2018).

## **Literature Review**

In this section of the essay, the literature review will follow the inverted pyramid model to ensure that literature is reviewed and is narrowed down from the overarching topic to more specific and relatable topics to this research (Leite et al, 2019). Firstly, the literature will focus on classroom management, which is the overarching focus of this research project, and is also essential when planning what rules to implement as is the case during the first, mostly observation, cycle of this research. This will be followed with a section on behaviour management that can be used in the classroom, and how they are effectively implemented to alleviate bad behaviour, which is the aim of the second research cycle in which classroom rules start to be implemented. Finally, the literature will focus on reward-based behaviour systems which will also be the focus of the final cycle of this action research project when a reward system is implemented in the classroom.

## **Classroom Management**

The term 'classroom management' often refers to the methods taken by teachers to safeguard students from a disruptive classroom environment while also guaranteeing that teachers can remain focused on the academic materials within a lesson (Hulac and Briesch, 2017; Egeberg et al, 2021; Aliakbari and Bozorgmanesh, 2015). Postholm (2013), however, believes that the reasoning behind classroom management is not only to ensure academic progress is made, but to ensure that students also have social and moral development because of an additional adult's guidance. Pagliaro (2017), on the other hand, goes further and says that classroom management and the curriculum are intertwined because, for both students and teachers to succeed, the classroom needs to be managed in a way that students' personal goals and goals in the curriculum can be met. Additionally, Pagliaro (2017) also suggests, since parenting has changed in the 21<sup>st</sup> century, classroom management not only refers to that of the classroom but also what takes place outside of school in the wider society. It is worth noting that there are many definitions that can be applied to various schools in different situations, but for the purpose of this research, the term classroom management is more closely aligned with Hulac and Briesch's (2017) definition since the aim is primarily to observe the students' behaviour before, during and after classroom management strategies have been implemented, while also ensuring that academic progress goes ahead unhindered.

In terms of classroom management strategies, Bennett (2021) recommends that low-level disruptions should be dealt with just as much as medium to high-level disruptions, because, by dismissing this sort of behaviour, it only increases the bar for what is considered acceptable by the students. This is illuminated further by Sieberer-Nagler (2016) who states that clear rules need to be set as these are important for students' academic and social behaviour and teachers should ensure that disturbances are addressed quickly to avoid disrupting the flow of the lesson. Therefore, this is the rationale behind the shortened first cycle, because, if limited interventions are made by the researcher, then the students' bar for acceptable behaviour will

already be raised which will make it harder to lower in later cycles when more classroom and behaviour management strategies are implemented (Bennett, 2021; Sieberer-Nagler, 2016). By doing this, the researcher can ensure that the students remain engaged in the instruction since lower rates of classroom management typically yield lower levels of engagement (Gage et al, 2018).

Besides classroom rules, Schiefele (2017) claims, a teacher's role in a classroom management should not strictly be rule-focused, but it should also mean that teachers themselves have an adequate amount of interest in what they are teaching, while they also adequately motivating students in an environment where they can learn how to behave and grow, both academically and socially. Conversely, Korpershoek et al (2016) found that classroom management strategies that focus on students' social-emotional development appeared to have the greatest outcome, although, it was largely only effective in improving social-emotional development (Korpershoek et al, 2016). Therefore, by ensuring that students can learn the classroom rules while also being adequately motivated and chances are given to build on students' social-emotional development, then overall classroom management should be improved (Schiefele, 2017; Korpershoek et al, 2016). Since this action research will focus largely on the implementation of rules and motivation, then it is expected that the positive environment is likely to have a domino effect on students' social-emotional and academic development which should ensure that overall classroom management is improved (Schiefele, 2017; Korpershoek et al, 2016).

### **Behaviour Management**

Unlike classroom management, which focuses primarily on rules and the overall classroom behaviour and development of students, behaviour management (strategies) are often made to manage or change students' behaviour, and these strategies can be applied on a school-wide basis, in a single classroom or even on a single student who needs extra support (Parsonson, 2012; Payne, 2015; Chaplain, 2016). Williams (2018), however, suggests that educators tend to view behaviour as something that needs to be "managed" and is often viewed in a negative light, but, instead, she recommends that it is something that should be viewed positively as behaviour is something that needs to be developed rather than managed. Although, in this action research project, the behaviour management strategies will only be applied in a single classroom, the students will, nevertheless, be encouraged that behaviour can be positive by receiving praise and rewards (Parsonson, 2012; Williams, 2018). Considering this, Baker (2020) proposes that praise is a teacher's best weapon in their arsenal since students often respond well to praise and are often likely to copy other students' behaviour so they can be praised too. However, Baker (2020) also notes that this could have the opposite effect and students could copy bad behaviour too. Therefore, the researcher will encourage students to copy good behaviour and dismiss bad behaviour since they will reap more praise and rewards if they behave more appropriately (Parsonson, 2012; Williams, 2018; Baker, 2020).

### **Reward-based Behaviour Management Systems**

Rewards have been used for positive and good behaviour for hundreds of years, but in the last few centuries, with the development of psychology, it has led to rise in behaviourist theorists, such as Pavlov (1897), Watson and Rayner (1920) and Skinner (1953; 1963; 1965); and their theories later got adapted and adopted into the classroom as a more productive way to achieve good behaviour amongst students.

Cowley (2014) suggests that rewards and sanctions are effective in encouraging students to behave better, work harder, stay motivated and boost low self-esteem while encouraging students to stick to boundaries set by the teacher, but she suggests that sanctions must be appropriate for the behaviour committed by the students, thus meaning that teachers should not blow things out of proportion while not allowing students to get off too lightly. This notion is further reinforced by the behaviourist theorist, Skinner (1953; 1963; 1965; Rafi et al, 2020), who indicates that positive reinforcement tends to lead to the required response or behaviour, which is further strengthened by a stimulus in the form of a reward. Therefore, this notion will be put to the test in this action research when students are rewarded by both participation and physical rewards in the second and third cycles, respectively (Skinner, 1953; 1963; 1965; Rafi et al, 2020). However, aspects of negative reinforcement will also be used since students will be required to behave well to gain participation

and rewards, thus encouraging students to behave well so they can experience the stimulus by providing the desired behavioural response by the researcher (Skinner, 1953; 1963; 1965; Rafi et al, 2020).

## **Methodology and Ethical Considerations**

This section of the research project will focus on the research methodology and the different data collection methods selected to be part of the study. It will also detail their advantages and disadvantages and ethical issues that such methods pose, if any, followed by a section on the benefits of triangulating such methods together.

### **Action Research**

Action research is normally an inquiry-based research project that is generally directly relevant to the researcher, normally the practitioner or teacher, who is responsible for classroom instruction and learning, and said research is normally used as a means of enhancing and improving teaching and learning either in a single classroom or school-wide (Stringer, 2014). Coghlan and Shani (2018) and Coghlan (2019), on the other hand, define action research as a combination of applied behavioural science knowledge that attempts to address existing knowledge and bring about change in real life organisations. Therefore, it is apparent that through multiple definitions that actions research projects are typically inquiry-based and focus on bringing about change and/or development in a specific area (Stringer, 2014; Coghlan and Shani, 2018; Coghlan, 2019).

Although action research remains an integral part of education, inquiry-based, research, it does, however, have some advantages and disadvantages. Wang (2015) and Cohen et al (2017) recommend action research as a research approach due to its reflective nature and the ability to focus on small-scale issues, which might only be present within a single classroom, thus enabling teachers to zone in on topics which might not necessarily impact other teachers within the school. Gibbs et al (2016) and Piggot-Irvine et al (2015) argue that action research remains more descriptive and reflective rather than being evaluative, thus implying that it cannot bring around substantial change or influence. However, Pring (2015) argues that by backing-up research with external opinions, it can provide more validity, but some might still question the objectivity of said research. This researcher's decision to do action research is due to the research being conducted within a single classroom and will ensure that changes can be made to the behavioural strategies through multiple trial and error, cycles that will be compared with existing research in the same area of focus (Wang, 2015; Cohen at al, 2017; Pring, 2015).

Despite there being multiple action research models to choose from, this action research project will follow the spiral model (Lewin, 1946; Burnes, 2020). By selecting the spiral model, the research will follow the same structure of diagnosing, planning action, taking action, and evaluation of action (Lewin, 1946; Burnes, 2020). This will ensure that the researcher has multiple attempts to trial differing classroom and behaviour management while refining them in between cycles to guarantee that the most progress is made (Lewin, 1946; Burnes, 2020).

### **Participant Observations**

The first data collection method for this action research project are participant observations which will be recorded using field notes (see: appendix A). Since participation forms the foundations of action research as the research is generally directly relevant to the researcher, then it is only wise for the researcher to participate, however, unlike non-participant observations that provide a sort of objectivity, participant observations do not have this and could be argued to be more biased (Cohen et al, 2017). However, since action research is generally aimed at making change directly via the researcher, it could be argued that a degree of subjectivity does not change the overall research goal of improving students' behaviour (Stringer, 2014). On the other hand, according to Hammond and Wellington (2020), non-participant observations lead to the person being observed potentially acting differently under pressure, hence non-participant observations will remove this pressure from the observations.

### **Semi-structured Interviews**

The second data collection method for this action research project involves semi-structured interviews, and these interviews will be recorded via field notes (see: appendix B). The researcher will interview the class teacher of the same class to see if they have noticed any noticeable changes in behaviour within the classroom. These interviews will be more beneficial than structured interviews, according to Adhabi and Anozie (2017), since semi-structured interviews do not always follow a set of pre-determined questions which might lead the interviewee down a path of subjectivity while also ensuring that the interviewees are more comfortable in answering questions. However, Alamri (2018) suggests, due to the context of the certain interviews, it could lead to the interviewees attempting to answer in a more desirable manner to protect themselves from being reprimanded if they breach any sort of professional procedures. Since this particular class is particularly known for their disruptive behaviour, then it is unlikely that these particular interviews will lead to the interviewees to answer in a more socially desirable way since all parties are familiar with the classroom behaviour of the target subjects (Alamri, 2018).

### **Documents**

The third data collection method will be a reward chart and the list of rewards that form the behaviour management strategy used within the third cycle (see: appendix C). The benefit of using this kind of document for an action research project that focuses on classroom management and behaviour management strategies is that it is relevant to the research which Martin (2018) suggests is the cornerstone of using documents for research purposes. However, Rapley and Rees (2017) suggest that using documents in research can be particularly time-consuming since the researcher has to spend time collecting the data. However, since the documents are collected as part of the researcher's standard day-to-day employment at the school, then it is no more time-consuming than anything else done outside of a teacher's standard duties (Rapley and Reese, 2017).

### **Triangulation**

This action research will use three data collection methods, that is participant observations, semi-structured interviews, and documents, and since this will be used alongside relevant literature, it will enable the research to ensure that triangulation and allow more room for objectivity due to the participatory nature of action research (Sherner and McKenney, 2018; Flick, 2018).

### **Ethical Considerations**

From the data collection methods listed above, there is no reason to believe that any ethical and data protection issues are presented since all students and interviewees names will be anonymised to protect those involved (BERA, 2018). Since all data is collected as part of the researcher's standard work arrangement, under the appropriate supervision, then there will be no potential constraints or impingements on said action research project (BERA, 2018).

## **Data Collection (Results) and Analysis, Recommendations and Limitations**

This section will focus on the data collection results and analyse the findings in order of the three cycles. After this, there will be a brief section on recommendations and limitations of the action research project.

### **Cycle 1**

During the first cycle (see: Appendix A and B), it became quite clear which students were responsible for the disruptions in the classroom and to what level of disruption these students were causing throughout the lessons. This led the researcher to begin drafting which behaviour management strategies would take place in cycle 2, and how these strategies can be used to begin to control the overall classroom management through starting to use behaviour management strategies that encourage good behaviour. In evaluation of the first cycle, it is worth noting that while more needs to be done in terms of classroom management, there should not be too much focus on rules and regulations within the classroom as they can be more detrimental than if more aspects of positive reinforcement are used (Keonya, 2021). This notion is further reinforced by Ingermarson et al (2020) who believed that unfriendly relationships between teachers and students are likely to make the classroom environment less supportive for the students, thus increasing chances of non-

compliant behaviour and disruptions within the classroom. Furthermore, research also suggests that by using praise, specifically behaviour-orientated praise, is likely to yield greater results than general praise, as it is likely to promote a positive learning environment while also improving student-teacher relationships (Ingerrmarson et al 2020; Spilt et al, 2016; Skiba et al, 2016). Therefore, the second cycle will take this into consideration, as this cycle will start to implement some behaviour management strategies (Ingerrmarson et al 2020; Spilt et al, 2016; Skiba et al, 2016).

## **Cycle 2**

In the second cycle (see: Appendix A), it became noticeable that the students were starting to understand that they need to behave well to get participation recognition after a few days. However, the more disruptive students took a while longer to be aware of this change and these students would often complain about not being selected, but once they were aware they would often temporarily behave well to gain participation and then revert back to behaving less favourably (See: Appendix A and B). This led the researcher to further enact a praise-focused behaviour management strategy that will be used in cycle 3. In evaluation of the second cycle, it became clear that a lack of participation led to the more disruptive students behaviour becoming a lot more erratic since they would only temporarily behave appropriately and then revert to being disruptive, particularly if participation was not obtained these students. However, as research suggests, negativity towards students is likely to be ineffective and further impact their behaviour (Browne, 2013). Therefore, as the students view non-participation as a negative, then it is likely to increase their disruptive behaviour after participation is awarded (Browne, 2013). This is illuminated further by Covington et al (2017) and Dörnyei (2019) who claim that rewards are often used to divert the attention away from the real task at hand, and it often leads to students only trying to achieve the bare minimum to be able to reach the reward(s), rather than trying to reach their full potential. However, this is unlikely to impinge on the individual disruptive students' academic progress in this instance, since they are being rewarded through participation in education-related topics, but it is likely to impact the wider classroom behaviour due to increased disruptions (Covington et al, 2017; Dörnyei, 2019). As a result of this, the third cycle will focus on a more well-rounded behaviour strategy that focuses on each month, rather than each individual lesson, thus reducing the chances of students doing the bare minimum for the rewards since longer term milestones have to be reached (Covington et al, 2017; Dörnyei, 2019).

## **Cycle 3**

In the third cycle (see: Appendix A, B and C), the students - at first, multiple students (highlighted red on Appendix C) continued to be disruptive, and this led to ticks being taken away from some students. However, towards the end of the month a lot of students appear to be getting more ticks (See: Appendix C). Therefore, it can be noticed that the students appear to be improving in their behaviour towards the end of the month, with only one student losing a tick in the fourth week of this cycle (See: Appendix C). As research suggests, this is likely to be attributed to the continual positive reinforcement that is present within the classroom, particularly since the level of positive reinforcement has increased greatly between the first and third cycles (Caldarella, 2020; Pajarillo-Aquino, 2019). Additionally, since the research went from very little behaviour management to a more positive reinforcement focused strategy, then it is likely the students would have effectively relearned how to behave what is deemed to be correct behaviour by the researcher, thus ensuring that students can start to behave more appropriately in the classroom setting as a result of the positive reinforcement (Rafi et al, 2020; NCII et al, 2020; CPBIS et al, 2020).

## **Recommendations and Limitations**

Due to the short timescale of this action research project, it will be hard to determine whether the results documented in this action research will remain the same in subsequent months in which the behaviour management strategy continues to be used (Stringer, 2014; Coghlan and Shani, 2018; Coghlan, 2019). Additionally, it is hard to determine if the behaviour management strategy were to be implemented on a school-wide level if it would have the same impacts as it did in the selected classroom (Stringer, 2014; Coghlan and Shani, 2018; Coghlan, 2019). However, since action research is typically meant to bring about change for the researcher, then it could also be argued that the purpose of this research has been fulfilled, being that the students now have improved behaviour since the action research was conducted.

## **Conclusion**

In conclusion, with reference to the data collected in the appendix and the read and reviewed literature, the researcher can assume that positive change has been made as a result of the action research project (Stringer, 2014; Coghlan and Shani, 2018; Coghlan, 2019). However, due to the small scale of the research, it will be hard to determine whether this action research can be generalised on a school-wide basis or in different schools, unless larger action research projects are conducted in similar contexts (Lam, 2015; Harry and Lipsky, 2014). However, the action research project, particularly the third cycle, promoted good behaviour and classroom management as a result of the positive reinforcement used (Caldarella, 2020; Pajarillo-Aquino, 2019).

That being said, it will also be hard to determine whether the behaviour management strategy will still be effective in the long-term since students might react less favourably to the positive reinforcement as time goes by or if rewards are not given to students in a timely manner (Gibbs et al, 2016; Piggot-Irvine et al (2015). Finally, since the behaviour strategy is only used on a single classroom basis, it might also not take into consideration the individual learning needs of each student, thus decreasing the efficacy for these individuals (Gage et al, 2018).

## References

- Adhabi, E. and Anozie, C.B. (2017) 'Literature Review for the Type of Interview in Qualitative Research', *International Journal of Education*, 9(3), pp. 86-97. doi: 10.5296/ije.v9i3.11483.
- Alamri, W.A. (2018) 'Effectiveness of Qualitative Research Methods: Interviews and Diaries', *International Journal of English and Cultural Studies*, 2(1), pp. 65-70. doi: 10.11114/ijecs.v2i1.4302.
- Aliakbari, M. and Bozorgmanesh, B. (2015) 'Assertive classroom management strategies and students' performance: The case of EFL classroom', *Cogent Education*, 2(1). doi: 10.1080/2331186X.2015.1012899.
- Baker, S. (2020) *A school without sanctions: a new approach to behaviour management*. London: Bloomsbury Education.
- Bennett, T. (2021) *Running the Room Companion: Issues in Classroom Management and Strategies to Deal with Them*. United Kingdom: John Catt Educational Limited.
- British Education Research Association [Bera] (2018) *Ethical Guidelines for Educational Research*. 4th edn. Available at: [https://study.sagepub.com/sites/default/files/bera\\_ethical\\_guidelines\\_2018\\_4th\\_ed.pdf](https://study.sagepub.com/sites/default/files/bera_ethical_guidelines_2018_4th_ed.pdf) (Accessed: 17 April 2022).
- Browne, K. (2013) 'Challenging Behaviour in Secondary School Students: Classroom Strategies for Increasing Positive Behaviour', *New Zealand Journal of Teachers' Work*, 10(1), pp. 125-147.
- Burnes, B. (2020) 'The Origins of Lewin's Three-Step Model of Change', *The Journal of Applied Behavioral Science*, 56(1), pp. 32-59. doi: 10.1177/0021886319892685.
- Caldarella, P. (2020) 'Effects of teachers' praise-to-reprimand ratios on elementary students' on-task behaviour', *Educational Psychology*, 40(10), pp. 1306-1322. doi:10.1080/01443410.2020.1711872.
- Center on Positive Behavioral Interventions and Supports [CPBIS]. *et al.* (2020) Returning to school during and after the crisis. June 2020. Available at: [https://assets-global.website-files.com/5d3725188825e071f1670246/5eece8935e4d8010fea193d9\\_Returning%20to%20School%20During%20and%20After%20Crisis.pdf](https://assets-global.website-files.com/5d3725188825e071f1670246/5eece8935e4d8010fea193d9_Returning%20to%20School%20During%20and%20After%20Crisis.pdf) (Accessed: 2 April 2022).
- Chaplain, R. (2016) *Teaching Without Disruption in the Primary School*. London: Routledge.
- Christner, N. *et al.* (2021) 'Children's psychological well-being and problem behavior during the COVID-19 pandemic: An online study during the lockdown period in Germany', *PLoS ONE*, 16(6), pp.1-20. doi:10.1371/journal.pone.0253473.
- Coghlan, D. and Shani, A. B. (2018) *Conducting action research for business and management students*. London: Sage.
- Coghlan, D. (2019) 'Demystifying Action Research', in Wood, L. and Zuber-Skerritt, O. (eds.) *Action learning and action research: genres and approaches*. United Kingdom: Emerald Publishing, pp. 83-96.
- Cohen, L., Manion, L. and Morrison, K. (2017) *Research Methods in Education*. London: Taylor & Francis Group. 8th edn.
- Covington M, *et al.* (2017) *Life beyond grades: designing college courses to promote intrinsic motivation*. Cambridge: Cambridge University Press.

Cowley, S. (2014) *Getting the buggers to behave*. London: Bloomsbury.

Dorn, E., et al. (2021) *COVID-19 and education: The lingering effects of unfinished learning*. Available at: <https://www.mckinsey.com/industries/education/our-insights/covid-19-and-education-the-lingering-effects-of-unfinished-learning> (Accessed: 2 April 2022).

Dörnyei Z., Muir C. (2019) 'Creating a Motivating Classroom Environment' in Gao, X. (ed.) *Second Handbook of English Language Teaching. Springer International Handbooks of Education*. Springer: Cham. pp. 719-736.

Egeberg, H., McConney, A. and Price, A. (2021) 'Teachers' views on effective classroom management: a mixed-methods investigation in Western Australian high schools', *Education Research Policy Practice*, 20, pp. 107–124. doi: 10.1007/s10671-020-09270-w.

Flick, U. (2018) *Doing triangulation and mixed methods*. Los Angeles: SAGE Publications.

Gage, N. A. et al. (2018) 'The Relationship Between Teachers' Implementation of Classroom Management Practices and Student Behavior in Elementary School', *Behavioral Disorders*, 43(2), pp. 302–315. doi: 10.1177/0198742917714809.

Gibbs, P., et al. (2016) 'Literature review on the use of action research in higher education. Educational Action Research', *Educational Action Research*, 25(1), pp. 3-22. doi:10.1080/09650792.2015.1124046.

Hammond, M. and Wellington, J. (2020) *Research Methods: The Key Concepts*. London: Routledge. 2nd edn.

Hojnoski, R. L., Missall, K. N. and Wood, B. K. (2020) 'Measuring Engagement in Early Education: Preliminary Evidence for the Behavioral Observation of Students in Schools–Early Education', *Assessment for Effective Intervention*, 45(4), pp. 243–254. doi: 10.1177/1534508418820125.

Hulac, D.M. and Briesch, A.M. (2017) *Evidence-based strategies for effective classroom management*. New York: The Guilford Press.

Jenkins L.N. et al. (2015) 'Rates and types of teacher praise: A review and future directions', *Psychology in the Schools*, 52(5), pp. 463-476.

Keonya, B. (2021) 'Rules Without Relationships Lead to Rebellion: Secondary Teachers and School Belonging', *School Community Journal*, 31(1), pp. 65-84.

Korpershoek, H. et al. (2016) 'A Meta-Analysis of the Effects of Classroom Management Strategies and Classroom Management Programs on Students' Academic, Behavioral, Emotional, and Motivational Outcomes', *Review of Educational Research*, 86(3), pp. 643–680. doi: 10.3102/0034654315626799.

Lam, R. (2015) 'Language assessment training in Hong Kong: Implications for language assessment literacy', *Language Testing*, 32(2), pp. 169-197. doi:10.1177/0265532214554321.

Leite, D., Padilha, M., and Cecatti, J. G. (2019) 'Approaching literature review for academic purposes: The Literature Review Checklist', *Clinics*, 74, e1403. doi: 10.6061/clinics/2019/e1403

Lewin, K. (1946) 'Action research and minority problems' *Journal of Social*, 2(4), pp. 34-46.

Martin, J. (2017) 'Historical and document research', in Cohen, L., Manion, L. and Morrison, K. (eds.) *Research Methods in Education*. Taylor & Francis Group: London, pp. 323-333.

- McGuinness, C. (2020) 'Educating at a Distance: A Redistribution of Roles', *Education Resources Information Center*, pp. 1-16. Available at: <https://files.eric.ed.gov/fulltext/ED605527.pdf> (Accessed: 2 April 2022).
- National Center on Intensive Intervention [NCII]. *et al.* (2020) *Returning To School: Considerations for students with the most intensive behavioural needs*. September 2020. Available at: <https://files.eric.ed.gov/fulltext/ED609018.pdf> (Accessed: 2 April 2022).
- Pagliari, M.M. (2017) *Questioning, instructional strategies, and classroom management: a compendium of criteria for best teaching practice*. Maryland: Rowman & Littlefield.
- Parsonson, B.S. (2012) 'Evidence-Based Classroom Behaviour Management Strategies.' *Kairaranga*, 13(1), pp. 16-23.
- Pavlov, I. P. (1897). *The work of the digestive glands*. London: Griffin.
- Payne, R. (2015) 'Using rewards and sanctions in the classroom: pupils' perceptions of their own responses to current behaviour management strategies.' *Educational Review*, 67(4), pp. 483-504. doi: 10.1080/00131911.2015.1008407.
- Piggot-Irvine, E., Rowe, W. and Ferkins, L. (2015) 'Conceptualizing indicator-domains for evaluating action research.' *Educational Action Research*, 23 (4), pp. 545– 66.
- Postholm, M. B. (2013) 'Classroom Management: What Does Research Tell Us?', *European Educational Research Journal*, 12(3), pp. 389–402. doi: 10.2304/eeerj.2013.12.3.389.
- Pring, R. (2015) *Philosophy of Educational Research*. (3rd edn). London: Bloomsbury Academic.
- Rapley, T. and Rees, G. (2017) 'Collecting Documents as Data', in Flick, U. (ed.) *The SAGE Handbook of Qualitative Data Collection*. SAGE Publications: London, pp. 378-391.
- Rafi, A. *et al.* (2020) 'The Implication of Positive Reinforcement Strategy in dealing with Disruptive Behaviour in the Classroom: A Scoping Review', *Journal of Rawalpindi Medical College*, 24 (2), pp. 173-179. doi:10.10.37939/jrmmc.v24i2.11903793.10.
- Schiefele, U. (2017) 'Classroom management and mastery-orientated instruction as mediators of the effects of teacher motivation on student motivation', *Teaching and Teacher Education*. 64, pp.115-126. doi: 10.1016/j.tate.2017.02.004.
- Shefner, J. and McKenney, Z. (2018) 'Confronting Political Dilemmas in Ethnographic Fieldwork: Consent, Personal Safety and Triangulation', in Iphofen, R. and Tolich, M. (eds.) *The SAGE Handbook of Qualitative Research Ethics*. SAGE Publications: London, pp. 219-230.
- Sieberer-Nagler, K. (2016) 'Effective Classroom-Management & Positive Teaching', *English Language Teaching*. 9 (1), pp.163-172.
- Singh, S. *et al.* (2020) 'Impact of COVID-19 and lockdown on mental health of children and adolescents: A narrative review with recommendations', *Psychiatry Res*, 293(113429), pp. 1-10. doi:10.1016/j.psychres.2020.113429.
- Skiba, R. *et al.* (2016) 'Teaching the social curriculum: Classroom management as behavioral instruction', *Theory into Practice*, 55(2), pp. 120-128.
- Skinner, B. F. (1953) *Science and human behaviour*. New York: Macmillan.

Skinner, B. F. (1963). 'Operant behavior', *American Psychologist*, 18(8), 503–515. doi: 10.1037/h0045185.

Skinner, B.F. (1965) 'The Technology of Teaching', *Proceedings of the Royal Society B: Biological Sciences*, 162(989), pp. 427-443.

Spilt JL, et al. (2016) 'Use of praise and reprimands as critical ingredients of teacher behavior management: Effects on children's development in the context of a teacher-mediated classroom intervention', *Prevention Science*, 17(6), pp. 732-742.

Stringer, E. (2014) *Action research in education*. United Kingdom: Pearson.

Watson, J.B. and Rayner, R. (1920) 'Conditioned Emotional Reactions', *Journal of Experimental Psychology*, 3(1), pp. 1-14.

Wang, S. (2015) 'Action research as a research method', *International Journal of Humanities and Social Sciences*, 2(1), pp. 98-103.

## Appendices

### Appendix A: Field notes from participant observations

#### Cycle 1

In the first cycle, it was noticeable that there are around 4 out of 25 students who display medium to high level disruption and generally want to be the centre of attention, while there are also 5 students who appear regularly display low-level disruptions within the classroom. Therefore, in total, there are around 9 students that regularly contribute to overall class disruption.

#### Cycle 2

In the second cycle, when participation is awarded to those who display positive behaviour, the students from cycle 1 who displayed medium to high level behaviour would often get upset if participation isn't awarded, but after some time they started to show signs that they were aware of the rules that they should be following. The low-level, however, most of the time would be able to follow the rules the majority of the time, apart from 1 low ability student who might take longer to understand due to his lower English comprehension.

#### Cycle 3

The students seemed excited about the implementation of the reward system and showed awareness by asking multiple questions about the prizes that could be won for each milestone. Although, in the first few weeks of the implementation, it took students to receive prizes and those who behaved less favourably to not receive prizes before the 9 students started to respond better to praise and reward chart.

### Appendix B: Field notes from semi-structured interviews

#### Cycle 1:

How would you describe the behaviour of the selected year 1 class at cycle 1?

"There are multiple students who appear disruptive, and some students appear to copy this behaviour. Although, there also appears to be a few stray students in there who are generally disruptive on their own."

#### Cycle 2:

How would you describe the behaviour of the selected year 1 class at cycle 2?

"The more disruptive students are showing basic signs of understand basic classroom etiquette and the low-level disruptions have almost completely faded."

#### Cycle 3:

How would you describe the behaviour of the selected year 1 class at cycle 3?

"The majority of the students, apart from the most disruptive ones, have all but stopped their disruptions within the classroom which leads to the overall classroom management being improved. However, it would be nice to see if student-focused behaviour management strategies can be used on those who still continue to be disruptive, despite the implementation of your reward chart."

