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Developing and Refining a Process to Improve Teacher Engagement with the Performance Management System in a School Setting

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Management System in a School Setting

Organisational Behaviour Management

Organisational Behaviour Management (OBM) is a sub-discipline of behaviour analysis which involves applying the principles of behaviour to the workplace. It uses individual and group contingencies to shape the behaviour of individuals working within an organisation to achieve higher productivity levels, quality, and performance. Reinforcement is a key element of many behaviour change programmes (Flora, 2004; Northup *et al*., 1993) including those in the sub-discipline of OBM. The reason being that it is influential in increasing performance in the workplace.

One area of OBM application includes performance management. This involves the management of individual employees or a group of employees through the application of behavioural principles. The process usually involves an analysis of the antecedents and consequences supporting the behaviours of individuals or groups within an organisation and manipulating these variables to either increase productive performance or decrease unproductive performance (Austin, 2000; Daniels and Daniels, 2004; Diener *et al*., 2009). Common behavioural interventions used within the performance management process include target-setting, feedback, job aids, token systems, and lottery systems (Diener *et al*., 2009).

If performance is not improving, then reinforcement is not occurring. A reinforcer provided immediately for improved performance has much more effect than a delayed reward (Michael, 2004). It is therefore crucial that reinforcement is provided immediately after the occurrence of improved performance. Individuals respond more predictably to small immediate certain consequences than they do to large future uncertain ones. Pay alone will not maximise performance. Effective and frequent positive reinforcement can, however, maximise performance in the workplace (Daniels, 2016).

The School's Performance Management System

In our school setting, for autistic children with learning disabilities, we introduced a new performance management process for all teachers that aligned to the mission, values and aims of the school, identified how individuals contribute to those goals, and established an organisational culture of daily

positive reinforcement where everyone knows the rules for effective reinforcement and practices them every day.

Research shows a correlation between teacher expertise and student outcomes (e.g. Greer, 2002; Greer *et al*., 2002). The rationale for the performance management system was to improve staff performance and expertise to improve outcomes for the students.

The school's performance management system was divided into three sections with targets set across these areas:

- Performance Evaluation: Behaviour targets related to job performance with some points allocated as group points;

- Professional Development: Study targets and other areas of professional development, e.g. attending a course, delivering a workshop, summarising a research article;

- Organisational Priorities: Priorities determined termly by the management team, e.g. running teaching observations, meeting with staff regularly.

Points allocated for targets met were exchanged for cash awards at the end of each school term. Annual cost of living increases remained in place to ensure salaries remained competitive.

A year after the new performance management system was implemented, a stakeholder group was established with the remit to review the current processes and to identify areas for development. Members of this group completed the OBM Applied certificate with Florida Institute of Technology. This project was part of that certification process (Rodriguez *et al*., 2016) and the stakeholder group was trained to use the Performance Diagnostic Checklist (Austin, 2000).

We aimed to improve the organisation's productivity and employee satisfaction through the refinement and further development of the performance management process based on teacher engagement with the process. More specifically, we aimed to increase the number of targets met by teachers. As stated earlier, the goal was improved outcomes for the students.

Method

Participants

All members of the teaching team, who had completed their probationary period of three months, participated in the study. The number of participants varied per month: Month one: 36 participants, Month two: 43 participants; Month three: 41 participants; Month four: 40 participants. Four teachers from this participant pool were interviewed using the Performance Diagnostic Checklist. These four teachers were 22-26 years old and had all worked full-time at the school for 11 months to two years at Month one.

Setting

The study took place at an independent special school that uses the Comprehensive Application of Behaviour Analysis to Schooling (CABAS®; Selinske *et al*., 1991) as its system for teaching. The school had 75 autistic students, aged 4-19 years, on roll and a corresponding teaching team of 75 members of staff. All teaching staff were working through CABAS® teaching ranks so had performance management targets set linked to completing these study components (within the area of professional development).

The CABAS® system is described more thoroughly elsewhere (e.g., Greer, 2002; Hawkins *et al*., 2007; Selinske *et al*., 1991) but it is important to highlight some key components because several performance management targets set for teachers were related to aspects of the CABAS® system. All programmes at the school were run using learn units (e.g., Albers and Greer, 1991; Greer, 2002; Greer and McDonough, 1999) and teachers were set targets related to the number of learn units they presented to students each day (within the area of performance). Another key aspect of the CABAS® system is the TPRA (Teacher Performance Rate/Accuracy; Ingham and Greer, 1992; Ross *et al*., 2005) which is an observational procedure used to collect data on student and teacher responding. Teachers were set targets related to TPRA accuracy (also within the area of performance). Finally, the decision protocol (Greer, 2002; Keohane and Greer, 2005) is used in CABAS® schools to support teachers to make decisions about when changes need to be made to student targets. Performance management targets were set regarding teacher decision accuracy (in the area of performance). Therefore, based on the type of targets se,t the ultimate goal was to improve student outcomes.

Research Tool

The main research tool was the Performance Diagnostic Checklist (Austin, 2000). It is an informant-based performance analysis tool designed for organisational settings to identify areas in need of improvement. The tool has proved to be useful in identifying variables that contribute to performance problems and designing interventions to improve employee performance (Austin *et al*., 2005; Ditzian *et al*., 2015; Pampino *et al*., 2004). The four areas of the organisation examined using the Performance Diagnostic Checklist are antecedents, equipment and processes, knowledge and skills, and consequences. Employees respond to 3-6 questions in each area. If questions are answered as "no" then these are indicative of a problem and a solution is sought. For example, Ditzian *et al*. (2015) identified problems with consequences as the variable contributing the most to poor employee performance and implemented individual verbal and graphic feedback delivered by a supervisor as the intervention.

Intervention

The results from the Performance Diagnostic Checklist are illustrated in Figure 1. Participants responded with 'No' across all areas apart from within the area of Knowledge and Skills. Therefore the intervention did not need to include any additional training on the performance management process for employees. The data highlighted problems in the following areas:

- Antecedents: Lack of visual aids while completing tasks;

- Processes: Layout of the performance management folder, lack of regular review of targets with line manager and no requirement for regular reporting;

- Consequences: Staff not receiving feedback.

Based on the results of the Performance Diagnostic Checklist, five changes were made to the performance management process (across three of the diagnostic areas):

- Antecedent: Flowchart designed, added to the performance management folder, and provided to all teachers at the start of the intervention;

- Process: Change/reduce graphing requirements; one summary monthly graph to be completed instead of daily graphing, as required in baseline;

- Process: Set rolling targets introduced. These meant to prevent disengagement with the process due to teachers not having enough time to meet with their line managers, have targets reviewed, and new targets set. This change added an element of self-management where teachers could set, review, and update their target;.

- Consequences: Weekly meeting with line manager set as a rolling target in the area of organisational priorities. This meant to increase the likelihood of line management meetings taking place to ensure that feedback was received on targets;

- Consequences: Regular monthly reporting set as a performance management rolling target in the area of organisational priorities. This meant to increase the likelihood of employees submitting their monthly reports in a timely manner.

Teacher Set Rolling targets

It was established that all teachers should have ten targets (ideally six from performance evaluation, two from professional development and two from organisational priorities) which included eight set rolling targets:

- To achieve monthly 80–100% TPRA accuracy.

- To achieve monthly 80–100% decision-making accuracy.

- To meet three-weekly learn unit target.

- To run all priority learning targets for students each week.

- To complete a study component on CABAS® teaching rank.

- To attend a school study session.

- To attend own line management meeting and review targets with line manager.

- To complete performance management form and submit data monthly.

The rolling targets for teachers were carefully selected to ultimately improve outcomes for the students. For example, research on the TPRA shows a relationship between accurate TPRAs and student learning (Ross *et al*., 2005). Furthermore, increasing the number of learn units presented to autistic individuals with a learning disability leads to more educational objectives being met (Greer *et al*., 2002). In addition, when decisions are made consistently while following a decision tree then students learn

significantly more (Greer *et al.*, 2002). Teachers were set two further individualised targets by their line manager. Line managers were directed to focus on student outcomes as part of this target-setting process, e.g., to run a certain programme with a student. In summary a system-wide approach of focussing on improving the performance and productivity of the teacher leads to improved outcomes for their students.

Data Collection

The best behavioural indicator of teacher engagement with the performance management system was the extent to which employees actively participated in the process by completing targets, meeting with their line managers, following the monthly reporting protocol, and participating in a discussion with their line managers and the project team about the processes in place.

The dependent variable was teacher engagement in the performance management process which was measured by:

- Number of teachers completing monthly summary forms;
- Average number of points per teacher per day (considering number of teachers who submitted data and number of working days);

Two months of baseline data were collected prior to the intervention being implemented. A further two months of data were collected post-intervention.

It was hypothesized that teacher engagement in the performance management process would increase following changes in the process based the Performance Diagnostic Checklist's results.

Results

As illustrated in Figure 2, results showed that the number of teachers completing and submitting monthly summary forms increased post-intervention. During pre-intervention in Month one, out of the 36 teachers in total, 16 teachers (43%) submitted their performance management data and in Month two, out of the 43 teachers, 15 teachers (33%) submitted their data. Following the intervention, there was an increase in Month three where out of 41 teachers, 25 teachers (55%) submitted their performance management data. Similarly in Month four, out of 40 teachers, 25 (60%) submitted their data.

Figure 3 shows the average number of performance management points per teacher per month. Pre-intervention, during Months one and two, an average of 28 and 22 performance management points were

earned. This increased, post-intervention. to 50 and 64 points in Months three and four respectively. The average number of points was 25 pre-intervention, and this increased by 128% to an average of 57 points post-intervention.

Social Validity

A social validity questionnaire was conducted during Month one. Teachers completed the questionnaire with responses ranging from 1 (being dissatisfied with the performance management system) to 7 (being entirely satisfied). There were 20 responses (55.6% of teachers) to the questionnaire and the mean response was 4.95. The same social validity questionnaire was conducted in Month four (post-intervention). There were 19 responses (46.3% of teachers) to this questionnaire with a mean response of 5.55.

Discussion

The results of this study showed an increase in teacher engagement in the school's performance management system following changes made to the process based on the results of the Performance Diagnostic Checklist. These changes included increased clarity about the process (the use of the flowchart), reducing the graphing requirements and introducing set rolling targets (with fortnightly line manager meetings and monthly reporting as two of these targets).

Educational Implications

The results highlight the importance of using a tool such as the Performance Diagnostic Checklist to find suitable solutions to problems such as lack of teacher engagement with a performance management system. It is important, as educators, that we look to the literature to support us with adjusting current processes and systems.

Based on the published research showing a correlation between teacher productivity and student outcomes (e.g., Greer, 2002; Greer *et al*., 2002; Ross *et al*., 2005) the results of the current study demonstrate a potential positive impact for the students at the school. Targets were set for teachers with the students' learning at the forefront.

Anecdotal feedback from teachers was overall positive regarding the performance management system and the changes that were made to it.

Limitations

Only four teachers were interviewed using the Performance Diagnostic Checklist. Interviewing of more teachers would have led to the identification of more solutions to address the issue of teacher engagement with the performance management process.

In hindsight, a modified version of the Performance Diagnostic Checklist, the Performance Diagnostic Checklist – Human Services (PDC-HS; Carr *et al.*, 2013), may have been a more suitable tool for the current study. This modified version is recommended if this project is replicated in other special schools.

One challenge encountered during this research project was competing priorities for the teachers. It is difficult for teachers to complete additional paperwork (the monthly summary forms) on top of other tasks to complete. Discussions are already underway regarding how to improve this process, e.g., to report half-termly instead of monthly when there is a natural break in the school routine and time can be scheduled at the end of each half-term for teachers to summarise their performance management points.

Future Research

Further feedback needs to be gained from teachers to determine what further changes can be made to the performance management process. This could involve conducting the Performance Diagnostic Checklist, or the PDC-HS, with a wider group of teachers.

It is noted that one less teacher responded to the social validity questionnaire in Month 4 compared to Month 1 and the overall percentage of respondents reduced from 55.6% to 46.3 %. An explanation cannot be provided for this reduction in responses, but we recognize that a decrease in responses could reflect less engagement with the performance management process. This contradicts our results if teacher engagement with the performance management process is measured as we have described. Future research could consider incorporating social validity into how engagement is measured.

Summary

In summary, teachers working in a school setting should focus on improving their students' outcomes. This goal can be achieved not just by setting targets for the children, but by setting targets for the teachers too. Delivering reinforcement consistently to teachers for meeting targets ultimately leads to better outcomes for the children. It is a system-wide approach that embeds behaviour analysis within the teaching

as well as within the organisation. Organisational behaviour management has a key role to play in many

settings as it uses individual and group contingencies to shape the behaviour of individuals working within

an organisation to achieve higher levels of productivity, quality, and performance. This leads to better

outcomes for the consumers, in this case for the autistic children with a learning disability.

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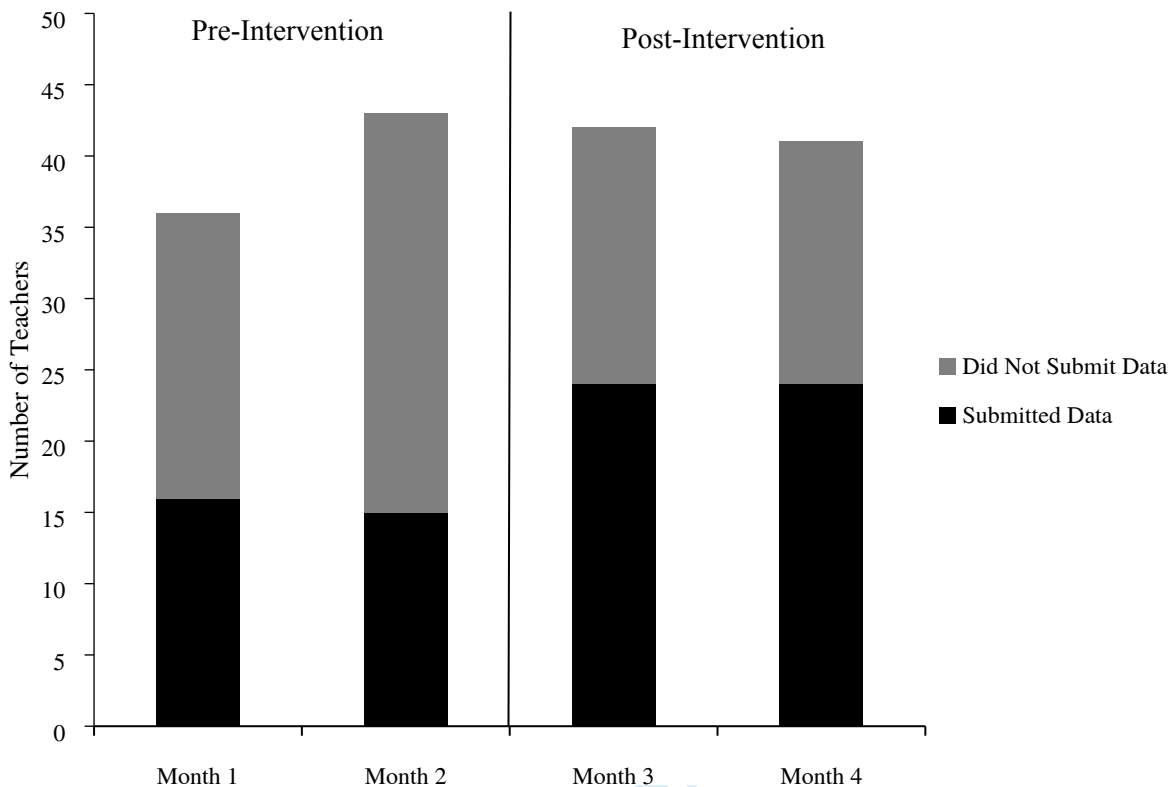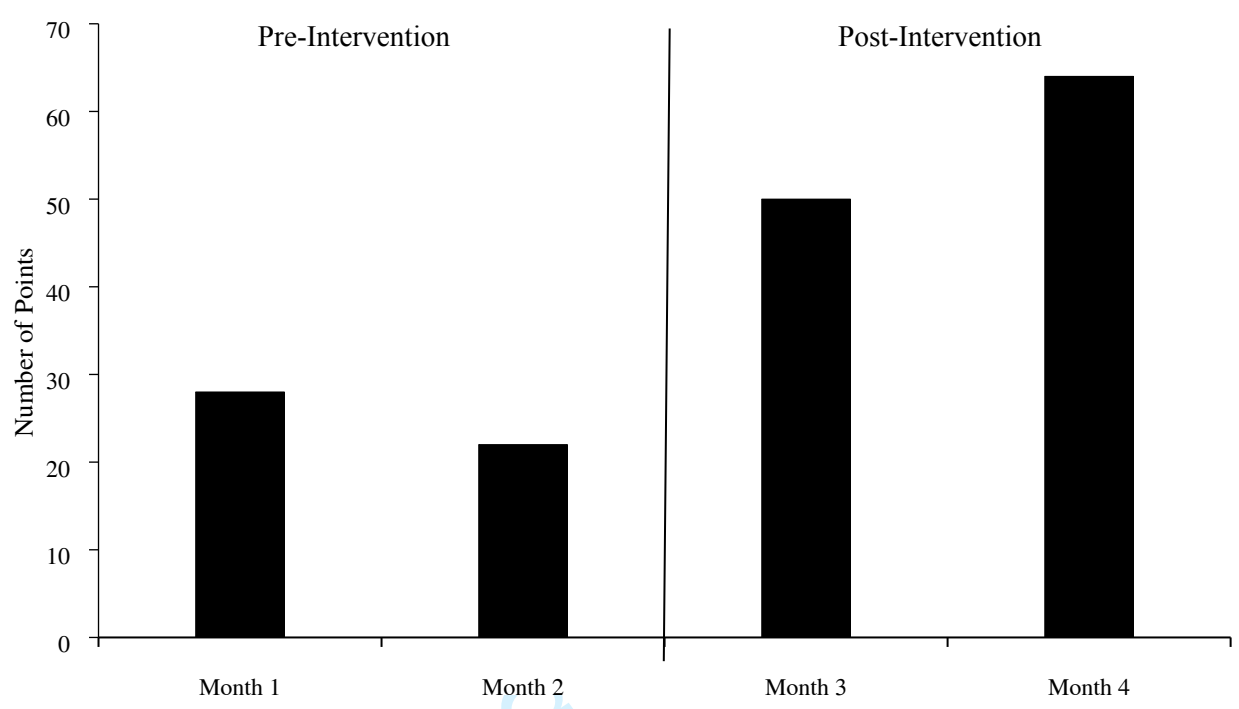50
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Figure 1

Results from the Performance Diagnostic Checklist
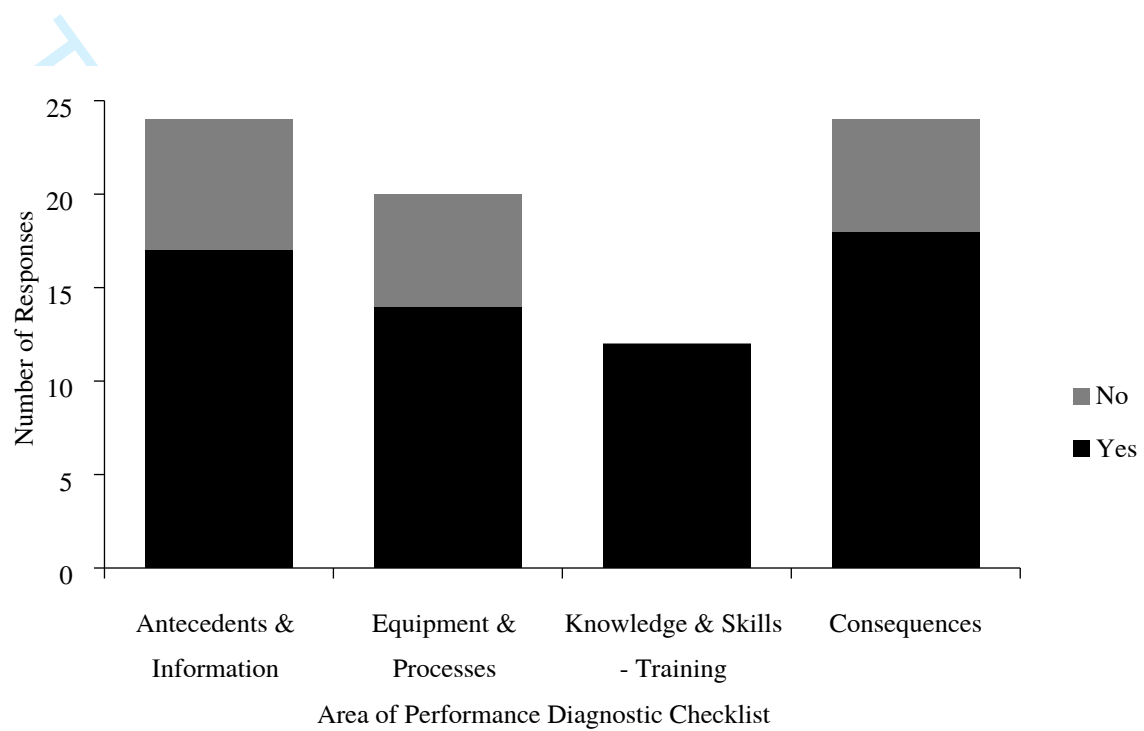
Figure 2

Graph to show number of teachers completing monthly summary forms pre-intervention and post-intervention.

Figure 3

Graph to show average number of performance management points earned per day.

Purpose:
This project reviewed and made changes to the performance management process in place for teachers in a school for autistic children with learning disabilities. The performance management process consisted of line managers setting targets for their staff and points were given for targets met. Targets were related to improving outcomes for the children in the school. Teacher engagement in the performance management process was measured by the number of teachers reporting their points monthly and the number of points earned monthly.

Design/methodology/approach:
The Performance Diagnostic Checklist (Austin, 2000) was conducted to determine changes to the process to improve teacher engagement with the performance management system. These changes to the performance management process consisted of an antecedent and information intervention (flowchart implemented summarising performance management process), equipment and processes interventions (change to graphing requirement, set rolling targets implemented) and consequence interventions (teachers set rolling targets to meet with their line manager regularly and to report on targets met monthly).

Findings:
The number of teachers completing and submitting monthly summary forms increased following the changes made to the performance management process. The average number of points received increased significantly during the intervention. The intervention implemented following use of the Performance Diagnostic Checklist led to increased teacher engagement in the performance management process and thus potentially improved outcomes for the children within the school.

Originality/Value:
The Performance Diagnostic Checklist is a fairly simple tool to use to identify solutions to problems in the workplace. The procedure utilised herein is replicable across many settings and different workplace issues.