

Exploring the knowledge and competency of positive behavioural support (PBS) amongst disability professionals in Singapore

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Abstract

Background: PBS is nascent in Singapore. Apart from a two-day training offered at a government funded institute, there is no other formal training. Disability professionals provide support to people with learning disabilities with behaviours of concern but the understanding and competency of PBS in Singapore is unknown. This paper aims to explore this area. The findings from this study would have important implications in terms of understanding the landscape in Singapore surrounding PBS.

Method and materials: Forty-four professionals from the disability sector in Singapore participated in the study. An online survey comprising 56 questions was voluntarily completed by each participant anonymously. Descriptive statistics were generated and associations and differences between variables were made.

Results: The findings indicated that, in Singapore, restrictive practice is still prevalent and PBS is not widely practised in the disability sector.

Discussion: Disability professionals in Singapore need access to more systematic and intensive training in PBS so that clinical practice can be better aligned to the human rights framework.

Keywords: positive behaviour support, disability, Singapore

Introduction

People with disabilities are at risk of abuse, neglect and deprivation, placement breakdown and reinstitutionalisation when they present with behaviours of concern (Baker and Allen, 2001; Chan, 2016). Studies have also shed light on the increased stress in family members and high staff turnover in disability services (Felce et al, 1993; Deveau and McGill, 2014). The presence of a mental illness and severity of the behaviours of concern, especially destructive behaviours, were factors that increased the likelihood of the person being subjected to restrictive practices and seclusion (Allen, Lowe, Brophy and Moore, 2009). Nevertheless, the use of restrictive strategies and seclusion is still prevalent internationally, as explained by Emerson (2002).

There is increased recognition that these restrictive practices and seclusion are likely to be brought about by poor quality of support provided by staff rather than from the person's behaviours of concern (Lowe et al, 2007). This begs the question of whether a change in the type and quality of support provided by disability staff in managing behaviours of concern might ultimately reduce restrictive interventions.

There are studies highlighting the benefits of positive behavioural approaches in managing behaviours of concern in persons with disabilities (Carr, 1999). LaVigna and Willis (2002), specifically described non-restrictive strategies such as diversion, reinforcing activities,

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strategic capitulation, and avoiding natural consequences to behaviours of concern, as more positive alternatives to restraint, seclusion and the use of emergency psychotropic medication. Carr et al (2002) claim that the PBS approach reflects a more general trend in the social sciences and education away from pathology-based models to a new positive model that stresses personal competence and environmental integrity.

Overview

PBS is essentially applied behaviour analysis (ABA) modified within the context of the contemporary value base of disability service provision (Carr et al, 2002). This is in line with the emphasis given by the United Nations Convention on the Rights of the Persons with Disabilities (UNCRPD) to the obligation of legal and administrative protection of well-being and dignity (Chan, French and Webber, 2011). The key features of ABA that are embodied in the PBS framework include the use of functional behavioural assessments to inform interventions, the remediation of problematic environments and specific teaching of alternative replacement behaviours as well as the manipulation of contingencies to promote positive behaviour and reduce behaviours of concern (Dunlap, Sailor, Horner and Sugai, 2009). PBS consists of functional behavioural assessment (FBA) principles. In addition to FBA, positive behavioural interventions and supports involve the whole school, and successful implementation emphasises the identification, adoption and sustained use of effective policies, systems, data-based decision making and practices (Sugai et al, 2000).

Benefits of PBS

There has been extensive literature citing the benefits of PBS. Following the implementation of a school-wide PBS programme, McIntosh, Bennett and Price (2011) reported a reduction in behaviours of concern and a reduction in at-risk students for significant behaviours of concern. Literature also points to the benefits of PBS for persons with neurodevelopmental disorders like autism spectrum disorder. Following PBS intervention, Lucyshyn et al (2007) reported a 75% reduction in behaviours of concern and the effects were maintained across a 6-month to 7-year follow-up period.

The benefits of PBS extend to staff as well. McGill, Bradshaw and Hughes (2007) highlighted in their research that staff became less likely to attribute behaviours of concern to emotional causes.

Barriers to PBS

While the principles and framework of PBS are clearly defined, the lack of adequate training received by disability staff often results in the implementation quality being compromised (Wardale, Davis, Carroll and Vassos, 2014). Wardale et al (2014) elaborated further that in order for PBS to be delivered effectively in an organisation, it is important for PBS training to be delivered and evaluated in a systematic and multi-layered manner with emphasis placed on organisational contexts that facilitate and support implementation of both the values and clinical aspects of PBS. One barrier that impedes the success of PBS could be the relatively high numbers of people with behaviours of concern, estimated at between 10% and 15% of the learning disability population (Emerson et al, 2001), and the necessarily small, often silted up, caseloads of intensive specialist support services. In relation to this, there are concerns that the low level of knowledge and skills of frontline staff, upon whom the successful implementation of interventions largely depend, makes it difficult for PBS to be implemented with success when there is a high number of persons with behaviours of concern (Ager and O'May, 2001). In view of these barriers to effective implementation of PBS, it would be useful to look at the international landscape in terms of practices and perspectives on behaviour management.

International perspectives on management of behaviours of concern

In the United States, amendments to the Individuals with Disabilities Education Act (IDEA) became law (Turnbull, 2005). These amendments introduced a number of new concepts, two of which are particularly important to the education of children whose behaviours violate school codes of conduct and/or are outside personal or interpersonal norms of acceptable social behaviour: (a) positive behavioural support (PBS) and (b) functional behavioural assessment (FBA). Section 614 (d)(3)(B)(i) of P.L. 105-17 states that 'in the case of a child whose behavior impedes his or her learning or that of others, the child's IEP team must consider, when appropriate, strategies, including positive behavioral intervention strategies and supports, to address that behavior.' Section 615 (k)(1)(B)(i) of the law states, 'if the local educational agency did not conduct a functional behavioral assessment and implement a behavioral intervention plan for such child before the behavior that resulted in the suspension described in subparagraph (A), the agency shall convene an IEP meeting to develop an

assessment plan to address that behavior.' In addition, 'if the child already has a behavioral intervention plan, the IEP Team shall review the plan and modify it, as necessary, to address the behavior.'

In the United Kingdom in 2014, the Department of Health released a guide for reducing restrictive practices, titled *Positive and Proactive Care: Reducing the Need for Restrictive Interventions*, which provided a framework to facilitate ways of rendering support to people with disabilities so that it reduces restrictive practices and enhances their quality of life. The guide emphasises the utility of PBS in achieving this outcome and also provides clear parameters within which any restrictive practices should sit, if they have to be implemented. Importantly, the paper guides practitioners in their development of person-centred behaviour support plans (Department of Health, 2014). This guide is very much needed given that studies have highlighted the relative dearth of such plans reported both for adults and children who present with severe behaviours of concern (Emerson, 2002; Robertson et al, 2005). The guide is complemented by the guide, *Challenging Behaviour and Learning Disabilities* which was developed by the National Collaborating Centre for Mental Health in 2015 and makes recommendations for the management and support of children. Specifically, it aims to provide best-practice advice on the management of behaviours of concern in persons with disabilities by evaluating interventions and improving assessment (National Collaborating Centre for Mental Health, 2015). In line with this, the PBS competence framework was developed in 2015 by the UK PBS Coalition with the aim of reducing misguided understanding and implementation of PBS by providing a detailed framework of the things that practitioners need to know and perform so that they can render best practice PBS.

In Australia, Commonwealth, State and Territory Disability Ministers endorsed the *National Framework for Reducing and Eliminating the Use of Restrictive Practices in the Disability Service Sector* in 2014 (Kinner et al, 2016). The framework focuses on the reduction of the use of restrictive practices in disability services that involve restraint (including physical, mechanical or chemical) or seclusion and it plays a pertinent role in ensuring consistency in state government approaches in managing behaviours of concern and reducing restrictive practice.

In Singapore, there is an 'Enabling Masterplan 3' rolled out in 2016 by the government, which emphasises improving quality of life for persons with disabilities and their caregivers. However, there is no specific legislation or policy to frame a standard for the management of behaviours of concern for persons with disabilities. This then makes this study even more important as the seminal paper in Singapore in terms of advocating for the adoption of best practice in managing behaviours of concern in people with disabilities. Currently, there is a two-day PBS training course offered by a government-funded training institute. This is the only PBS training offered in the country. The training is entirely classroom based and covers theoretical aspects of PBS while also covering case discussions and application.

Significance of study

The high correlation between persons with learning disability presenting with behaviours of concern and aversive outcomes like exclusion, abuse, seclusion as well as a range of restrictive interventions has been highlighted extensively (Chan and Sigafoos, 2000; Webber et al, 2011). Allen et al (2009) and Webber et al (2011) further specified that restrictive practices come in the form of mechanical, physical and chemical restraints. The implication is that persons with disabilities who present with behaviours of concern face a high risk of being subjected to highly unethical practice. French, Chan and Carracher (2010) emphasised this when they explained that punitive and aversive approaches to the treatment of persons with learning disability presenting with behaviours of concern are inconsistent with human rights. Moreover, ethical concerns aside, the long-term effectiveness of these aversive and restrictive approaches in terms of managing behaviours of concern have also been questioned (Webber, Ramcharan and McLean, 2010). Hence, there has been a shift towards embracing more positive approaches to behaviour management, of which PBS is at the forefront because of its emphasis on autonomy, dignity and focus on changing the environment rather than the person. This is in line with the emergence of the application of a human rights paradigm to clinical practice and service delivery to persons with learning disability and behaviours of concern (French et al, 2010).

In Singapore, the disability sector comprises non-profit organisations which provide services across the lifespan for persons with disabilities. These organisations are funded by the government and/or statutory boards. Professionals in these organisations are known as disability professionals who are trained in the allied health disciplines such as psychology, social work, occupational therapy or physiotherapy. There is currently a lack of understanding of the landscape of local clinical practice in terms of the predominant approach used by disability staff and the extent to which it aligns to the human rights paradigm. Additionally, PBS is nascent in Singapore. Other than the two-day training being offered at a local government funded institute, there is no other formal training offered at the tertiary level. Professionals working in the field of social services in Singapore may typically learn it as part of a degree course, either at local or overseas universities. Many professionals in the disability sector provide support to people with learning disabilities with behaviours of concern but the knowledge and competency of PBS is unknown in Singapore. This paper aims to shed some light in this area. The findings from this study would have important implications in terms of understanding the current practice in Singapore of managing behaviours of concern in persons with disabilities. Furthermore, it provides an understanding of the background of disability professionals who are allied health professionals who offer clinical services to persons with disabilities. As such, it provides an understanding of the landscape in Singapore surrounding PBS. The findings of this study will be pertinent in identifying gaps and in taking practical steps towards meeting the needs of professionals supporting people with learning disability. Broadly, the findings are important in shaping the future of PBS in Singapore.

There are four broad research questions: (a) establishing the extent to which PBS is used in the disability sector by professionals; (b) exploring the level of understanding of PBS amongst professionals in the disability sector; (c) monitoring the perceived level of competency of PBS amongst professionals in the disability sector; and (d) defining the training required by professionals to increase their competency in delivering PBS effectively. It is important, as we design a survey questionnaire to explore these research questions, that we take reference from an instrument that is established and aligned to PBS principles.

The Behaviour Support Plan Quality Evaluation-II (BSP QE-II)

The BSP QE-II (Browning Wright et al, 2005) was developed by senior clinical staff within the Positive Environments Network of Trainers (PENT) in California. It was based on the evaluation of 400 behaviour support plans which were identified as 'successful' (Browning Wright et al, 2005). The BSP QE-II has 12 components that are aligned to aspects of PBS. Examples of components of the BSP QE-II are 'Functionally equivalent replacement behavior (FERB) must be identified that will be taught and reinforced to allow the student's need (function) to be met in an acceptable manner', and 'The communication segment of the BSP details progress monitoring during the plan's implementation'. The BSP QE-II has been found to have acceptable psychometric properties (Wardale et al, 2014; McVilly et al, 2013). The item-total correlations had an average of .59. Internal consistency was .80 and inter-rater reliability was found to be .80 (Wardale et al, 2014). The BSP QE-II has been used by studies which evaluate positive behaviour support training (Wardale et al, 2014).

Method

Participants

Forty-four professionals (32 females and 12 males) from the disability sector in Singapore volunteered and participated in the study. The online survey was disseminated via email to disability professionals from 13 disability organisations in Singapore by their respective directors. These organisations represent the bulk of disability service provision in Singapore, and together they serve people with a range of disability types. Participant anonymity was observed throughout the study. When participants submitted the survey, the responses were captured directly onto the Survey Monkey database without any personal identifiers. Due to the nature of the way the survey was distributed and the manner in which the data was captured, it was not possible to calculate the response rate and non-responses. 'Professionals' were defined as any allied health professional who delivers behaviour support to people with intellectual and developmental disabilities. Twenty-two of them were occupational/physiotherapists, 13 were psychologists, seven were speech-language therapists, one was a behaviour therapist and one was a therapy aide. The participant demographics are found in *Table 1* in the Appendix.

Measure

An online survey comprising 56 questions was used for this study. The questions elicited: (a) background information about the participants including whether they have had experience using PBS in their work; (b) their understanding of PBS; (c) their perceived competency in delivering PBS in their day-to-day work; and (d) the kind of support that is needed to increase professionals' competency in delivering PBS. There were two parts to the questionnaire.

The first part of the survey form comprised 16 questions that looked at participants' background information such as gender, job category, highest qualification, place where highest qualification was obtained, length of time in current job, length of time in disability sector, history of working with behaviours of concern, type of behaviours of concern worked with, experience of witnessing restraint/seclusion, recommending restraint/seclusion and whether they have received formal PBS training.

The second part of the questionnaire assessed participants' knowledge and perceived competency in PBS. 'Knowledge' was defined as their perceived understanding of PBS while the definition of 'perceived competency' was how well they think they can apply their understanding of PBS principles in their daily work.

Thirty of the questions in this part of the survey were partly adapted from components of the BSP QE-II. Eight questions were related to critical themes of PBS such as autonomy, dignity, quality of life and a systems approach while two questions were related to the training and support participants felt they needed in order to improve in delivering PBS. Examples of the survey questions were: 'I am competent in describing how each identified function is logically related, ie, consistent with, the predictor(s) of each of the behaviours of concern'; and 'I know the importance of planning the behaviour support plan in a multi-tiered, systemic manner such that it involves the larger systems, ie, caregivers, staff, school/centre, programmes, community'. These questions are aligned to the BSP QE-II components 'Identified functions of behaviour' and 'The communication segment of the BSP details progress monitoring during the plan's implementation', respectively. The survey questions were answered based on a five-point Likert scale ranging from 'Completely disagree' to 'Completely agree'.

Procedure

Ethics approval was sought and obtained from an external independent medical ethics board (Parkway Independent Ethics Committee (PIEC), which is appointed by Parkway Hospitals Singapore Pte Ltd). The survey questions were put on the online Survey Monkey platform and the 'anonymous response' option was selected. Following that, an email was sent to the Executive Directors or Chief Executive Officers of 13 social service organisations in the disability sector to disseminate the online survey link to their own professionals. Participants were given three weeks to complete the survey, after which the data was collected and analysed. Participants' data were stored in the survey monkey database without any identifiers.

Data analysis

Descriptive statistics (frequencies) were used to explore the extent that PBS is being used in Singapore by disability professionals, the profile of these professionals, their understanding and their perceived competency of PBS, as well as their perceived need for more intensive PBS training. Second, a paired sample t-test was carried out to compare differences between participants' overall knowledge and their perceived competency of PBS. Third, an independent sample t-test was carried out to compare participants' understanding of FERB related concepts and other aspects of PBS. Subsequently, chi-squared analysis was carried out to explore if those who had gone through some form of PBS training had higher knowledge and perceived competency of PBS than those who did not. Then, correlational analyses were carried out to explore the possible association between professionals' level of understanding of PBS and their perceived competency in applying their knowledge to their day-to-day work. Additionally, qualitative responses were analysed to determine the kind of support required by professionals to increase their competency in delivering PBS.

Results

Participants' knowledge of PBS concepts was positively correlated with their perceived competency of applying PBS in their daily work, $r(44)=.95$, $p<.01$. This indicates that the higher their level of understanding of PBS concepts, the more they believed that they were able to implement PBS in their day-to-day work.

There was a significant difference in the scores of overall knowledge of PBS ($M=57.6$, $SD=12.01$) and

overall perceived competency ($M=53.4$, $SD=13.8$) conditions; $t(43)=5.55$, $p=0.00$. This indicates that disability professionals have a better understanding of PBS concepts than their perceived competency of applying PBS on their day-to-day work.

Both this and the earlier finding point to the conclusion that it was not sufficient for participants to understand PBS principles because they might still struggle with applying it.

There was a significant difference in knowledge scores between the scores for those who went through some form of PBS training ($M=4.2$, $SD=1.3$) and those who did not ($M=2.2$, $SD=0.84$); $t(42)=-2.592$, $p=0.013$. There was also a significant difference in perceived competency scores for those who went through some form of PBS training and those who did not ($M=56.7$, $SD=5.7$); $t(42)=-2.994$, $p=0.05$. These results suggest that PBS training does have an effect in terms of professionals' knowledge and perceived competency of delivering PBS in their work. Specifically, our results suggest that when professionals go through some form of PBS training, they have better knowledge of PBS and they believe that they are more competent in delivering PBS in their day-to-day work.

In the context of PBS training and implementation of PBS, a significant interaction was found, $F(1)=3.988$, $p=.046$. Disability professionals who had gone through some PBS training (22.7%) implemented PBS in their day-to-day work to a greater extent than those who did not go through any training (77.3%).

Discussion

Past studies have shown that while PBS is widely accepted and researched in the area of service delivery and support for persons with disabilities, skills are insufficiently widespread (Lowe et al, 2007). Given that PBS is nascent in Singapore, this study sought first to explore the PBS landscape among disability professionals in Singapore and, second to inform the training needs of disability sector staff in the area of behaviour support. This has important implications in raising the standards of service delivery in the disability sector in Singapore.

The majority of disability professionals who responded had not received any PBS training and only slightly more than half of them reported having implemented PBS in their work settings. Furthermore, most of them have either witnessed or personally recommended the use of restraints and/or seclusion in their work settings.

It is a concern that disability professionals, who come up with behaviour support plans, are not trained with enough rigour in PBS and do not use its principles in their work. Even more alarming is that clinical practice in the disability sector in Singapore appears to be quite far from being aligned to the human rights paradigm.

The higher their level of understanding of PBS concepts, the more staff believed that they were able to implement PBS in their day-to-day work. A possible reason for this could be that a lack of understanding of PBS and its related concepts may reduce the self-efficacy of disability professionals' in incorporating PBS in their behaviour support plans. This is supported by the study done by Lohrmann, Forman, Martin and Palmieri (2008) where they had identified that one of the barriers to staff utilising positive behaviour support was their lack of understanding of how the approach could bring about positive change.

Disability professionals report a better understanding of PBS concepts than their perceived competency of applying PBS in their day-to-day work. It was not sufficient for participants to understand PBS principles because they might still struggle with applying it. One reason for this finding could possibly be the consultative, expert-led method of behaviour management, where professionals devise a behaviour support plan for the direct support staff to carry out rather than carrying out the strategies themselves. In doing so, the staff might not have had sufficient practice in applying PBS concepts. Another possible reason could be the lack of focus on practical application in the training in PBS that disability professionals in Singapore go through. The two-day PBS training, currently the only PBS course offered in Singapore, covers the theoretical framework and concepts of PBS and has a lesser focus on application due to the limited training hours.

The results suggest that PBS training does have an effect in terms of professionals' knowledge and perceived competency of delivering PBS in their work. Specifically, our results suggest that when professionals go through some form of PBS training, they have better knowledge of PBS and they believe that they are more competent in delivering PBS in their day-to-day work. This is consistent with current literature. Wardale et al (2014) found that staff knowledge and competency in delivering PBS in their work setting had improved following the implementation of a systematic PBS training programme. Disability professionals who had gone through the two-day PBS training implemented PBS in their day-to-day work to a greater extent than those who did not go through any training.

Practice implications

PBS is an approach that, aside from ABA techniques of behaviour management, emphasises human rights enhancements and improved quality of life for persons with disabilities. It is these additional elements that distinguish it from ABA (Wardale et al, 2016). Lavigna and Willis (2012) found, through a review of PBS outcome studies, that practitioners may be obligated to use PBS when faced with the need to develop a plan of support given the ethical principle of using the least restrictive method consistent with the right to effective treatment.

Webber, McVilly, Fester and Chan (2011) explained that provision of quality clinical support to direct support staff was crucial in development and implementation of quality behaviour support plans which also led to a reduction of the use of restrictive practices. Hence, the role of the disability professional in delivering quality behaviour support plans and reducing restrictive practice is crucial. This then emphasises the need for quality PBS training for disability professionals who come up with behaviour support plans. Wardale et al (2016) highlighted that, in order for PBS to be implemented effectively, the training needs to be focused on outcomes that are directed to all proposed benefits of the PBS, equally considering both its value base and actual impact upon behaviours of concern.

This study suggests that in Singapore the use of restrictive practice such as restraints and seclusion may be a concern. Other crucial findings of this study are that disability professionals in Singapore lack sufficient training in PBS, and, while they have an understanding of the components of PBS, they lack confidence in implementing it effectively in their day-to-day work. A significant portion (77%) of disability professionals reported not receiving any form of PBS training while only slightly more than half of them reported to have implemented PBS in their day-to-day work. These numbers, along with the fact that 71% of professionals reported to have observed restrictive practice such as seclusion and restraints in their work settings, point to the dire need to push for clinical practice to be aligned with PBS framework so that it fits within the human rights paradigm.

Limitations

The sample size of 44 participants is small and as such, may not be representative of the profile of disability professionals in Singapore. Additionally, as some results are reported as significant at the .05 level, there may be risk of error in the findings especially when multiple comparisons are being made. Also, in Singapore, psychologists are tasked with coming up with behaviour support plans. However, in the study sample, only 30% of participants were psychologists. Hence, it would have been useful to have a bigger representation of psychologists in the sample to have a more accurate picture of their proficiency in PBS. It would also have been useful to explore other types of restrictive practices such as chemical restraint.

Future recommendations

This study is the first in Singapore to look at PBS in the disability sector, in terms of the extent of its use as well as the knowledge and perceived competency of PBS amongst local disability professionals. The findings of this study imply that there is a pressing need for more intensive, systematic training in PBS with a focus on practical application.

It would be useful to replicate the study with a bigger sample that focuses on psychologists so that a more representative and accurate picture of PBS in the disability sector in Singapore can be obtained. Furthermore, it is important also to evaluate the quality of behaviour support plans within the sector to have a clearer idea of the standard of clinical practice as well as the extent to which PBS is being used in practice by professionals.

Appendix

Table 1: Demographic factors of study participants

		Number of participants (N=44) n (%)
Gender	Male	n=12 (27.3%)
	Female	n=32 (72.7%)
Highest qualification	Masters	n=16 (36.4%)
	Honours	n=14 (31.8%)
	Bachelors	n=12 (27.3%)
	Graduate diploma	n=1 (2.3%)
	Diploma	n=1 (2.3%)
Place where highest qualification was obtained	Singapore	n=15 (34.1%)
	Overseas	n=29 (65.9%)
Job category	Psychologist	n=13 (29.5%)
	Speech-language therapist	n=7 (15.9%)
	Behavior therapist	n=1 (2.3%)
	Occupational/physiotherapist	n=22 (50%)
	Therapist aide	n=1 (2.3%)
Current work setting	Special education	n=24 (54.5%)
	Adult day activity	n=10 (22.7%)
	Adult sheltered workshops	n=4 (9.1%)
	Residential	n=6 (13.6%)
Length of time in current job	Less than 12 months	n=11 (25%)
	12 months to 3 years	n=14 (31.8%)
	3 years to 5 years	n=9 (20.5%)
	More than 5 years	n=10 (22.7%)
Length of time in disability sector	Less than 12 months	n=5 (11.4%)
	12 months to 3 years	n=12 (27.3%)
	3 years to 5 years	n=8 (18.2%)
	More than 5 years	n=19 (43.2%)
Length of time worked with behaviours of concern	Less than 12 months	n=11 (25%)
	12 months to 3 years	n=11 (25%)
	3 years to 5 years	n=8 (18.2%)
	More than 5 years	n=14 (31.8%)
Type of behaviour of concern worked with	Aggression	n=36 (81.8%)
	Disruptive behaviours	n=37 (84.1%)
	Self-injury	n=35 (79.5%)
	Sexuality related behaviours	n=25 (56.8%)
	Poor social skills	n=35 (79.5%)
	Adjustment difficulties	n=27 (61.4%)
	Frequent absenteeism	n=19 (43.2%)
	Others	n= 9 (20.5%)
Received some form of PBS training	Yes	n=10 (22.7%)
	No	n=34 (77.3%)
Have implemented PBS at work	Yes	n=23 (52.3%)
	No	n=21 (47.7%)
Witnessed implementation of restraint/seclusion	Yes	n=31 (70.5%)
	No	n=13 (29.5%)
Personally recommended use of restraint/seclusion	Yes	n=13 (29.5%)
	No	n=31 (70.5%)
Perception that more intensive training on PBS is needed	Disagree	N=1 (2.3%)
	Neutral	N=4 (9.1%)
	Agree	N=14 (31.8%)
	Strongly Agree	N=25 (56.8%)

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