

Behaviours of concern, where a person engages in behaviours that impact the wellbeing and/or safety of themselves or others, have been identified as the single biggest issue faced by direct support staff working in disability services (Bowring et al., 2017). Positive behaviour support, or PBS, is defined as an approach for enriching quality of life and reducing problem or challenging behaviours that limit person-centred and rights-based lifestyles (Carr & Horner, 2007). The latest advancements in PBS emphasise a systemic tiered approach to the provision of proactive rights-based cultures of support to enrich quality of life and ease distressed behaviours for all individuals in an organisation (Gore et al., 2022). Sustainable and efficient evidence-based frameworks to enrich the quality of the lives of adults with intellectual disabilities and improve the quality of supports implemented by social and health care services is a socially, politically, and economically important area of investigation.

Setting-wide PBS is considered a complex intervention, the composition of which often varies depending on the organisation in which it is implemented. One common denominator however in systemic programmes is workforce development or staff training (Evans et al., 2020; Higgins, 2021). These professional development programmes for front line staff include topics such as communication supports, capable environments, active supports, skill development and supporting relationships (Leitch et al., 2020; Tomlinson et al., 2017). Participants are often expected to use their newly acquired knowledge and skills in their practice following training (McGill et al., 2018). Building capacities in direct support personnel is crucial as they are the direct link between the organisation and the service user. Training front line teams requires significant investment, particularly considering the difficulties recruiting and maintaining staff teams in disability services (Singh et al., 2014). However, translating knowledge and learning into practice change is a notoriously difficult task (Ersek et al., 2012; Lewis et al., 2020).

The investigation of the implementation of complex interventions, such as setting-wide PBS, has become a science in its own right (Bauer & Kirchner, 2020). Eccles and Mittman (2006) defined implementation science as “the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practice in routine practice and, hence, to improve the quality and effectiveness of health services” (p. 1). This approach allows for investigation across multiple strata of service provision, from individuals, to settings to entire organisations (Bauer & Kirchner, 2020).

A development in implementation research focused on the influences of health-related professional behaviour is the Theoretical Domain Framework, or TDF (Atkins et al., 2017). This conceptual structure integrates 33 theories of

behaviour and behaviour change into 14 domains or clusters. A corresponding theory supporting the TDF for changing behaviour is the COM-B model (Cane et al., 2012). This model proposes that at any given juncture, a specific behaviour would occur only if the individual concerned has the capability, opportunity, and motivation to engage in that action (Michie et al., 2011). The capability dimension encompasses psychological and physical elements, opportunity contains physical and social features, and the motivation dimension contains both instinctive and introspective domains (Michie et al., 2011). Cane et al. (2012) demonstrated that the TDF mapped successfully on to the COM-B model, as illustrated in Table 1, and proposed that the use of the COM-B model could aid identification of domains that are likely to be important agents of behaviour change.

**Table 1**

*Theoretical domains framework and COM-B domains (Cane et al., 2012)*

COM-B	TDF Domain	Definition
Capability	Knowledge	A recognition of the reality of something
	Skills	A capacity or ability developed through training
	Beliefs about capabilities	Acknowledgment of the certainty, reality or legitimacy of the consequences of a behaviour in a given context
	Behavioural regulation	Focus on management or change of objectively observed or quantified events
	Memory, attention & decision processes	The capacity to recollect information, to focus specifically on features of the environment and make decisions based on that information
Opportunity	Social influences	Interpersonal practices that can induce others to alter their thoughts, behaviours, or emotions
	Environmental context and resources	Various conditions of an individual's environment and/or state that influences the development of capacities, adaptive behaviours, social competencies and autonomy
Motivation	Social/professional role and identity	A clear set of competencies and individual assets in a work/social setting
	Optimism	The assurance that positive outcomes will materialise, or anticipated goals will be achieved
	Intentions	A deliberate choice to engage in a specific behaviour or practice

Goals	A desired aim or ambition set by an individual
Beliefs about consequences	Acceptance of the validity or truth of a capacity that an individual can employ constructively
Reinforcement	The process of encouraging or establishing a belief or pattern of behaviour
Emotion	Innate or intuitive sentiment, as distinguished from reasoning or knowledge, by which the person seeks to process a significant event

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The COM-B model has been widely used to examine facilitators and barriers to practice change across health care environments (Boyd et al., 2020; Lambe et al., 2020). To date, it does not appear that the model has been used to examine the implementation of setting-wide PBS in social care practice. Researchers have used the domains to develop semi-structured interview schedules in qualitative investigations of practice change (Bossink et al., 2020), illustrating the benefits of including qualitative research methodologies as part of systemic organisational change investigations (Garcia & Gluesing, 2013).

The aim of this study was to employ a qualitative research design to explore staff perspectives on the initial introduction of setting-wide PBS in a community based residential setting for adults with intellectual disabilities, using the COM-B model as a conceptual framework, with a view to improving future implementation of this model in these settings. These staff engaged in a workforce development programme designed to build their capacities in setting-wide PBS, which is outlined in Table 2. The main research questions were: a) what facilitators, and b) what barriers, did support staff experience when attempting to bring their learning about setting-wide PBS into their practice in their respective work settings? We believe the current study to be the first to apply this model of implementation science to research in the implementation of PBS. Content analysis of participant interviews was used to generate proposals for measures to improve transformation of PBS knowledge to practice in disability service provision.

**Table 2***Components of the Setting Wide PBS Workforce Development Programme*

Description	Time Frame	People Involved
Tier 1 PBS Training	1 online session per month for 8 months	Lead researcher Training participants SMT (to support attendance)
Follow-up Coaching Sessions	Online – as required (offered monthly)	Lead researcher Training participants
Organisational Progress Review Meetings	Every 6-8 weeks	PBS Steering Group
Employment of existing resources (e.g., clinical supports, continuous professional development etc.)	As required	Lead researcher Practice Leaders SMT MDT DSP
Employment of external resources (e.g., state funded clinical interventions, primary care health services etc).	As required	Lead researcher Practice Leaders SMT MDT DSP
Fading of intervention	Penultimate and final month of training programme	Lead researcher Practice leaders SMT/DSP

*Abbreviations: Senior Management Team (SMT), Direct Support Personnel (DSP), Multidisciplinary Team Meeting (MDT).*

**Methods****Research Team**

The lead author had an undergraduate degree in psychology, a postgraduate master's degree in applied behaviour analysis, specialist training in positive behaviour support and had worked in the field of intellectual disability and complex needs for more than twenty years. The research assistant was a postgraduate student in applied psychology and was previously employed as a health care assistant in a direct support role by the host organisation for approximately 18 months and had several years' experience working in the disability sector.

## Participants and Setting

The study took place as part of a programmes of research investigating the implementation of setting-wide PBS in an adult disability residential service in Ireland. The organisation consisted of twenty-seven community based supported living sites and a day service. Twenty-one employees were approached in the recruitment phase. Inclusion criteria were that participants had completed a setting-wide PBS workforce development programmes in the host organisation as outlined in Table 2. Fourteen participants consented to the research and completed interviews. A minimum sample size of at least twelve participants has been recommended where the aim of the research is to understand common experiences among a group of reasonably similar individuals (Guest et al., 2006). Participant characteristics in respect to their position in the organisation are displayed in Table 3. Twelve participants were female and two were male. Further details of participant characteristics, such as work location, were purposefully not collected to protect the privacy of the study participants and encourage participation.

**Table 3**

*Participants According to Role in the Service*

Role in Organisation	n (%)
Health Care Assistant (HCA)	5 (35.8)
Person In Charge (PIC)/Team Leader	4 (28.6)
Senior Management Team (SMT)	4 (28.6)
Nurse (RNID)	1 (7.1)

## Research Design

This study adopted a qualitative theoretical content analysis design (Braun & Clarke, 2013) using semi-structured interviews with the study participants. This deductive approach to qualitative research involves the exploration of specific theoretical frameworks in the analysis process (Braun & Clarke, 2013). A semi-structured interview schedule based on the COM-B model was adapted from a similar schedule developed by Lambe and colleagues (2020). Questions were focused on participants' capability, opportunity, and motivation to implement the imparted PBS competencies in their daily work and are provided in Table 4. Finally, the theoretical domains framework outlined in Table 1 (Cane et al., 2012) was adopted as a coding structure for analysis of the participant transcripts.

**Table 4**

*Semi-structured Interview Schedule (adapted from Michie et al., 2014, (Lambe et al., 2020))*

COM-B Domain	Interview Question
Capability	What training have you received in appropriate setting-wide PBS practices?
	Are you confident in your knowledge of PBS procedures or do you think further training or supports are needed?
	What prompts are there to remind staff when and how to engage in PBS procedures in your work setting?
Opportunity	How is there a focus on encouraging adherence to PBS practices in your work setting?
	Do you have enough time to implement PBS practices for each person supported, or is that difficult?
	What materials are necessary (e.g., visual schedules) for PBS and are these always available to you in your work setting?
Motivations	What factors hinder you from adhering to PBS guidelines?
	What factors encourage you to adhere to PBS guidelines?
	Do you think adherence to PBS practices is important for the people you support (in terms of their overall wellbeing and safety) and why?

## Procedure

Interviews were carried out by the lead and assistant researchers in May 2021. Participants were recruited using a purposive sampling technique where staff that had completed a setting-wide PBS workforce development programme in the host organisation, were contacted by the research team by phone or email and provided with information about the study. It was made clear to all prospective participants that no identifying information would be gathered or used in the research, and that the content of their interviews would in no way impact on their role in the organisation. Interviews were conducted by either the lead researcher or the research assistant based on availability and used the semi-structured interview schedule presented in Table 4. Additional unscripted

questions and responses were used at times where relevant (e.g., “could you tell me more about your experience of online learning?”). All interviews were conducted remotely using the video conferencing platform Zoom (<http://www.zoom.com>). Audio recordings of the interviews were transcribed using an online transcription tool (<http://www.otter.ai>) which converted the audio recordings to a digital word processing file (.docx). Interviews ranged from 18 to 42 minutes in duration. The completed transcripts were meticulously checked for accuracy and anonymity by the lead researcher, and the original audio recordings were then deleted as per research protocol.

## Analysis

A deductive content analysis approach was adopted in this study. A computer-based software package, MAXQDA (<http://www.maxqda.com>) was used to code the raw data. A 29-point checklist of criteria for improving the trustworthiness of content analysis was used throughout the study and is provided in Table 5 (Elo et al., 2014). For example, double coding, where the transcripts were coded by both the lead researcher and the research assistant, was employed to assess the quality of the theoretical domain framework (Schreier, 2012).

**Table 5**

*Checklist to Improve the Trustworthiness of a Content Analysis Study (Elo et al., 2014)*

Phases of the study	Procedure	Checklist questions
Preparation Phase	Data Collection Method	How do I collect the most suitable data for my content analysis? Is the method the best available to answer the target research question? Should I use either descriptive or semi-structured questions? Self-awareness: What are my skills as a researcher? How do I pre-test my data collection method?
	Sampling strategy	What is the best sampling method for my study? Who are the best informants for my study? What criteria should be used to select the participants? Is my sample appropriate? Is my data well saturated?

Organisation phase	Selecting the unit of analysis	What is the unit of analysis? Is the unit of analysis too narrow or too broad?
	Categorisation and abstraction	How should the concepts or categories be created? Is there still too many concepts? Is there any overlap between categories?
	Interpretation	What is the degree of interpretation in the analysis? How do I ensure that the data accurately represent the information that the participants provided?
	Representativeness	How do I check the trustworthiness of the analysis process? How do I check the representativeness of the data as a whole?
Reporting phase	Reporting results	Are the results reported systematically and logically? How are the connections between the data and results reported? Is the content and structure of concepts presented in a clear and understandable way? Can the reader evaluate the transferability of the results (are the data, sampling methods and participants described in a detailed manner)? Are quotations used systematically? How well do the categories cover the data? Are there similarities within and differences between categories? Is scientific language used to convey the results?
	Reporting analysis process	Is there a full description of the analysis process? Is the trustworthiness of the content analysis discussed based on some criteria?

## Results

Summary information for the participants who commented on the 14 TDF domains is provided in Table 6. During data extraction of the transcripts, it was established that all statements made by the participants could be coded using the TDF. One additional theme of the Covid-19 pandemic emerged during the analysis of the data. It was decided to include this as an additional domain due to



the atypical nature of the specific circumstances (i.e., the global pandemic) encountered during the investigation. A summary of each of the TDF domains with participant quotations are presented below under the three headings of the COM-B model. The MAXQDA software allowed the research team to create a heat-map of the analysed data, shown in Figure 1, which helped to create a visual tool to explore the relationships between the coded sections.

**Table 6**

*Statements Made by Participants Corresponding to TDF Domains and COM-B dimensions*

COM-B Dimension	TDF Domain	No. of participants n(%)
Capability	Knowledge	13 (92.9)
	Skills	5 (35.7)
	Belief about capabilities	14 (100)
	Behavioural regulation	2 (14.3)
	Memory, attention and decision processes	4 (28.6)
Opportunity		(100)
	Social Influences	14 (100)
Motivation Dimension	Environmental context and resources	14 (100)
		(70.4)
	Social/Professional role and identity	14 (100)
	Optimism	12 (85.7)
	Intentions	13 (92.9)
	Goals	10 (71)
	Beliefs about consequences	13 (93)
	Reinforcement	5 (36)
Emotion	2 (14)	

*Note.* Abbreviations: TDF – Theoretical Domain Framework.

**Figure 1**

*Theoretical Domain Framework Code Relations Matrix for Participant Data*

Code System	Imp...	Em...	Rein...	Beli...	Goals	Inte...	Opti...	Soci...	Envi...	Soci...	Me...	Beh...	Beli...	Skills	kno...	Beli...
Impact of covid-19									1							
Emotion				4				5	4	3					1	2
Reinforcement				1	2	1	2	2	1	2					3	1
Beliefs about consequences		4	1		11	11	18	35	55	13		2	7	2	28	13
Goals			2	11		19	9	10	18	5	1	3	3	4	15	7
Intentions			1	11	19		13	18	30	7	1	4	6	2	20	7
Optimism			2	18	9	13		12	16	4		1	7	2	10	4
Social/professional role and identity		5	2	35	10	18	12		121	48	4	7	16	14	44	30
Environmental context and resources	1	4	1	55	18	30	16	121		55	9	10	27	10	57	62
Social influences		3	2	13	5	7	4	48	55		4	3	4	9	25	8
Memory, attention & decision processes					1	1		4	9	4			1	1	3	4
Behavioural regulation				2	3	4	1	7	10	3			1	1	5	3
Belief about capabilities				7	3	6	7	16	27	4	1	1			11	25
Skills				2	4	2	2	14	10	9	1	1			18	5
Knowledge		1	3	28	15	20	10	44	57	25	3	5	11	18		21
Beliefs about capabilities		2	1	13	7	7	4	30	62	8	4	3	25	5	21	

*Note.* Numbers reflect the co-occurrence frequency of codes in the analysed data.

## Capability Dimension

Most participants described improved knowledge resulting from completion of the training programmes and commented positively on the broad scope of the PBS model. The main barrier identified by participants was the potential lack of knowledge or skills in other team members, which can result in resistance to change, and poor implementation of PBS practice, “if everyone's working off the same page, results are good, you know, that if there's gaps or if there's some people doing it, and some people not, the main person that's losing out is person supported” (P09).

The predominant barrier identified in this domain was the online training delivery format. Staff expressed a preference for face-to-face learning environments and felt that the online approach impacted their focus and capacity to engage with the content. Staff also found it challenging to protect the time for online learning, and they often had to attend training during work shifts, “and as well as that, obviously, demands of work when you're on an in an online meeting, and you're physically in the area, people call on you an awful lot. So it's very hard to keep your focus” (P01).

## Opportunity Dimension

All staff mentioned the significance of social influences on the implementation of PBS in the work setting. A dominant theme was the importance of the relationship between staff and the adult with ID, with a general view that stronger relationships resulted in a more engaged and invested team, “You do need to give every staff a chance to build a relationship with the person

to have the confidence and the trust to move on to do something that's a little bit out of someone's comfort zone" (P01). An integrated staff team with a shared value base was also identified as an important feature of the PBS framework.

Staff resources was the predominant theme among participants, with many of the staff highlighting staff turnover, relocations, and limited staffing ratios as barriers to implementation, "There are very few cases where there are sufficient staff to be able to implement all of the programmes" (P17). With regards to enablers for practice change, staff noted the systemic element of the PBS model as an essential component for the adoption and assimilation of learning into practice, "If it's not systemic across the whole service, then, you know, you're only hitting, hitting it in spots. I think it has to be systemic to have the effect and the benefit on all the people we support" (p13).

### **Motivation Dimension**

Many participants shared a constructive view of potential outcomes resulting from the systemic adoption of the PBS model. Several participants felt that the organisational component of the model provided confidence in the adoption of this cultural shift in services. Staff believed that a positive attitude to practice change, and documentation of outcomes provided the impetus to maintain this setting-wide PBS culture shift in the future. Furthermore, the shift in expectations for the adults with ID supported in the service was identified by staff as instrumental in reducing restrictive practices, "So I think definitely it would benefit from them, for them massively, em, to live just less restrictive life. And, em yes, kind of open more doors for them instead of closing on them" (P09). Staff noted a lack of investment in training for staff as a barrier to implementation of the model. While the service provided a range of mandatory training, this was focused mainly on risk reduction and compliance, rather than quality of supports and person focused skill development in support staff.

### **Covid-19 Pandemic**

The pandemic featured strongly in the findings, with 71.4% of participants (n=10) referring to the impact of Covid-19 related matters in their interviews. The impact on the daily plans and goals of the people supported, in terms of staff absences and Covid-19 restrictions were noted as barriers to adoption of PBS. Several staff described the social isolation that some adults with ID experienced, and how the restrictions were a barrier to achieving individualised goals, "And he's just, he, like, he found COVID, very difficult and all and not being able to see his family and different things like that" (P02).

## **Discussion**

Innovations for training staff in PBS are now accessible for those intent on progressive systems change in service provision (Evans et al., 2020; McGill et al., 2018). Implementation science provides a means of investigating the processes involved in changing the behaviour of staff so that efforts for system change may be evidence based (Eccles & Mittman, 2006).

### **Capabilities dimension**

Service personnel reported confidence in their understanding of the value base and concepts of setting-wide PBS following training. Significant developments have been made over the past twenty years in establishing quality frameworks for staff training in PBS (Dench, 2005; McClean et al., 2005) and more recently setting-wide PBS (Leitch et al., 2020). Less is known about effective ways to secure investment in the development and maintenance of these capacities. Competencies of direct support staff are frequently cited in the literature as a barrier to quality service provision (Dench, 2005; Hunter et al., 2020). Services often focus their limited training budgets on rudimentary mandatory training for support staff to comply with national standards and regulations. However, these standards are often very general and abstract, and open to very broad interpretation by service providers (McEwen et al., 2021). Furthermore, assessment of compliance in this area often focuses more on service policy and procedure rather than evidence-based outcomes in terms of the lived experience of the people supported by these services (Murphy & Bantry-White, 2020).

The online method of training was identified by several participants as a barrier to practice change. It has been demonstrated that attitudes and responses to planned online learning and emergency online learning can diverge, with more positive outcomes resulting from planned online instruction (Hodges et al., 2020). While there are also some promising developments in using online methodologies for evidence-based skill development (Carnett et al., 2020), considerable investment in the development of quality training materials and equipment is required to safeguard the quality and efficacy of future capacity development programmes. This is an important area for future research in disability service provision.

### **Opportunities Dimension**

The significance of relationships between staff and adults with ID emerged as an important theme in the opportunities dimension of the COM-B model. There is considerable evidence of positive outcomes when staff are

expected to change how they relate to the people they support as an outcome of training (Hastings, 2005; Hollins & Steckley, 2020). Griffith and colleagues (2013) reported that positive and respectful relationships with staff were found to be a constructive element of residential services. Frequently people with ID consider support staff as friends, as they have limited opportunities to create and maintain friendships with their peers (Fulford & Cobigo, 2016). It is noteworthy that this specific factor is not cited within the key components of PBS described by (Carr et al., 2002), or in the core principles of setting or school-wide PBS outlined by Sugai and Horner (2008). High staff turnover, redeployments of staff within services and poor staffing levels are frequently cited as problem areas in disability service provision (Gomes & McVilly, 2019), and are detrimental to relationships between staff and people with intellectual disabilities (Friedman, 2018). Future research in the principles and values of setting-wide PBS needs to consider where relationships between staff and the people they support fits in the current conceptual framework.

Mentorship and supervision featured as important agents in the opportunity dimension for behaviour change among staff participants. Previous studies have recognised the role of team leaders as a key component in the quality of support provided by staff (Beadle-Brown et al., 2015; Hume et al., 2021). In an environment of high turnover, changing teams and lone working, it is crucial that first line managers are supported to provide regular skilful mentorship and supervision to their subordinates. Despite this, many staff experience a dearth of direct supervision and mentorship (Friedman, 2018), which is concerning as service providers are often reliant on an on-the-job or 'trial and error' approach to capacity development for new recruits (Erath et al., 2019). It is troubling that study participants in front-line management roles all cited high workload and time pressure as a barrier to behaviour change in their responses, which is reflected in the literature (Orellana et al., 2016). There are some promising studies evidencing the importance of practice leadership in supporting organisations and staff to provide high quality support for people with ID (Beadle-Brown et al., 2015; Bigby et al., 2019). Practice leadership is described as the development and maintenance of high-quality staff support through several distinct and measurable factors that can be specifically trained in front line managers (Beadle-Brown et al., 2015). This is an enduring need in service provision and requires further investigation if investment in workforce development programmes are expected to provide sustainable behaviour change in direct support staff, and positive outcomes in the lives of vulnerable adults.

### **Motivation dimension**

Participants identified that the integration of setting-wide PBS into existing organisational policies, procedures, and data systems as an important

factor in motivating culture change within the system. Setting-wide PBS needs to be mirrored across all organisational policies, not just policies related to the management of distressed behaviour, for it to be integrated into practice on a cultural level.

Specific and measurable goal setting was noted by respondents as an effective motivator for behaviour change in staff teams. The periodic service review (LaVigna et al., 1994) is well evidenced as an effective tool for progress monitoring (McClean et al., 2007; McGill et al., 2018). Effective data systems for capturing service user outcomes are less substantiated. Almost all participants described positive outcomes in the lives of the people they support as an important motivator for behaviour change. Schalock and colleagues (2018) propose the use of assessed quality of life scores for people in receipt of services, for organisational and systems-level monitoring and reporting, quality improvement and research purposes. They describe how these scores may be employed at a micro (individual/residential setting), meso (organisational) and macro (state and larger) level, paralleling the setting-wide PBS three-tiered model of intervention. This approach could provide an important development to quantitatively measure the impact of systems change in quality of social care services and provide the much-needed impetus for leaders to fund systemic interventions focused on quality of life experienced by people with ID.

Participants identified role ambiguity, workload, and unpredictability in current and future team dynamics as barriers to their motivation for practice change. Role issues such as role ambiguity and conflict have frequently been cited as significant factors in work related stress experienced by staff (Ryan et al., 2019; Smyth et al., 2015). Most direct support staff are employed as health care assistants, which has been described as a 'high effort low reward' position in disability organisations (Czuba et al., 2019). This may explain why some staff struggle with moving from a custodial care or paternalistic model to a skilled, strengths-based model of support such as setting-wide PBS (Sheerin et al., 2015). Evidenced protective factors such as reciprocity in relationships with people supported, colleagues and management (Stevens et al., 2021), increased flexibility in the workplace (Rhee et al., 2019), effective supervision systems and role clarity (Devereux et al., 2009) deserve investment by funders and service leaders if quality outcomes are to be realised for service recipients.

### **Limitations**

The study has several limitations. Firstly, the participant group predominantly comprised of staff in direct support roles (n=10) and a smaller cohort in middle management positions (n=4). For organisations to fully adopt setting-wide PBS, it is crucial that staff at the most senior level of management such as service leaders, also share their insights to ensure the value of any service

development schemes that may come from the outputs of the investigation. Secondly, the definition of setting-wide PBS is very broad, to incorporate all the necessary elements of systems change within the value structure of the model. The COM-B model was originally developed to evaluate very specific behaviour change, and its suitability for more comprehensive perceptions of behaviour change is undetermined. Process evaluation of complex interventions provide an another or perhaps complementary approach to examining implementation for future enhancements (Grant et al., 2013; Oakley et al., 2006). However, the COM-B model and the theoretical domain framework represent a broad spectrum of behaviour change paradigms, and this qualitative study following the previous quantitative investigation of setting-wide PBS, provides a mixed methods approach to understanding the complex intervention (Petticrew et al., 2013). Finally, future inclusive research exploring implementation of PBS with and by adults with ID, though procedurally and ethically challenging, is crucial if PBS is truly a person-centred rights-based paradigm. Methodological advances such as the use of visuals or “photovoice” (Heffron et al., 2018; Milner & Frawley, 2018) provide innovative means to embark on this valuable sphere of research.

## **Conclusions**

Systemic concerns with direct support personnel (DSP) wellbeing, retention and capacity development continue to be prevalent in disability service provision. Challenging behaviour is the most evidenced factor related to staff wellbeing within the intellectual disability sector (Ryan et al., 2019). It is reasonable to propose that systemic adoption of evidence-based systems of support to reduce distressed behaviours are required to address this issue. The present study shares similar findings with other research in staff perceptions of training programmes designed to transform practice (MacDonald & McGill, 2013; McKenzie et al., 2020). Outcomes indicate a need for significant investment in widespread, mandatory evidence-based training programmes in quality of support for direct support personnel, first line managers and service leaders. Similar approaches have been evidenced in the US (Freeman et al., 2005; Reid et al., 2003) and are developing in the UK, with alliances between state healthcare services and universities emerging as means of achieving this result (McKenzie et al., 2020). Quality of life measures may provide the much-needed evidence base at all system levels to effect meaningful change. Funding commissioners need to look beyond reactive models of support and focus on demonstrated and sustainable models of service provision and workforce development to achieve tangible outcomes for the most vulnerable in our society.

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