VID

Staff Attribution of Challenging Behaviour and Their Implicit Theories Within and Outside a Positive Behavioural Support Framework

Hilde Karin Sønneland

VID Specialized University

Sandnes

Master's Thesis

Master's degree in Citizenship and Co-Operation

Supervisor: Professor Frode Svartdal

Bi-supervisor: Assistant Professor Ulf Berge

Wordcount: 9200

09.05 - 2019

II

Abstract

Positive behavioural support (PBS) is currently establishing itself as a framework for practice in services for individuals with intellectual disabilities in Norway. This study examines whether training and practising within a positive behavioural support framework may influence staff's way of thinking. Ways of thinking were measured in terms of staff attribution patterns and implicit theories regarding possibility to change. Qualified staff (n=309) from 15 municipalities in Norway participated. Findings suggest that there were no significant relationships between PBS training, attribution patterns, and implicit theories in this research sample. Implications and limitations are discussed.

Foreword

Hilde Karin Sønneland

Sandnes – May, 2019

Contents

1 Article

Staff Attribution of Challenging Behaviour and Their Implicit Theories Within
and Outside a Positive Behavioural Support Framework

Hilde Karin Sønneland

VID Specialized University

Abstract

Positive behavioural support (PBS) is currently establishing itself as a framework for practice
in services for individuals with intellectual disabilities in Norway. This study examines
whether training and practising within a positive behavioural support framework may
influence staff's way of thinking. Ways of thinking were measured in terms of staff
attribution patterns and implicit theories regarding possibility to change. Qualified staff
(n=309) from 15 municipalities in Norway participated. Findings suggest that there were no
significant relationships between PBS training, attribution patterns, and implicit theories in
this research sample. Implications and limitations are discussed.

Keywords: Positive behavioural support, attribution, implicit theories, mindset,
challenging behaviour, intellectual disability

2

Staff Attribution of Challenging Behaviour and Their Implicit Theories Within and Outside a Positive Behavioural Support Framework

The present study examines whether training and practising within specific theoretical frameworks will influence staff's way of thinking with regards to challenging behaviour (CB) displayed by individuals with intellectual disabilities. This question is inspired by research on teachers that has demonstrated the impact on teaching effectiveness of teachers' mindset and the teachers' belief in student abilities. Such mindsets are either fixed, which is characterised by the avoidance of change and challenges, or malleable, which is distinguished by an individual's value of new ideas, effort and learning (Chan, 2012). To illustrate the importance of such mindsets, Canning et al. (2019) demonstrated that students were demotivated and had more negative experiences in classes taught by fixed (versus malleable, or growth) mindset faculty. Faculty mindset beliefs predicted student achievement and motivation above and beyond any other faculty characteristics, including gender, ethnicity, age, experience, or tenure status (Canning et al., 2019). Similarly, Gutshall (2013) conducted research where teachers' mindset towards students with disabilities were studied. She found teachers' mindsets to be related to their views of student disability. Gutshall's (2013) study further revealed that teachers' mindset was strongly correlated with their mindset ratings for student scenarios regarding disabilities, suggesting that if teachers believe that ability can be changed or grow, the teacher is also likely to view student ability in the same manner.

Inspired by these findings, the present study asks if staff working with individuals with intellectual disabilities and CB demonstrate similar tendencies. Specifically, it is focused on staff practising in a positive behavioural support (PBS) framework, which emphasises an approach where individuals can grow and develop (Allen, 2009). This question was investigated by asking staff working in schools and community-based settings to rate why CB occurs when individuals with intellectual disabilities display aggressive behaviour. This was done by asking participants to complete the Challenging behaviour attributions scale (CHABA) (Hastings, 1997). Their implicit theories, or mindsets, were also examined concerning beliefs about the potential to change. This was conducted by measuring mindset beliefs with the Norwegian Growth Mindset Measure (NGMM) (Svartdal, 2016).

The theoretical and clinical framework of practice examined in this study, PBS, favours strategies that focus on changing antecedent conditions that trigger CB, developing skills as an alternative to such behaviour, and using differential reinforcement to shape more adaptive behaviours (Allen, 2009). In other words, core features of PBS are consistent with the very hallmark of a growth mindset. It is, thus, of interest to examine if staff practising in a PBS framework would be more inclined to hold a growth mindset towards their work and service users or pupils when working with CB. As Canning et al. (2019) and Gutshall (2013) demonstrated, university faculty and teacher's implicit theories, or mindsets, may have practical implications for service users' or pupils' experience and the effort that staff put towards individuals with intellectual disabilities due to their view of the person's ability.

To further broaden this examination, causal attribution was chosen to investigate if there were any substantial difference in how staff practising within a PBS framework perceived CB compared with other practitioners with different executive theoretical frameworks of practice. The rationale behind combining these two areas of research in the present study was based on staff attributional causation, in addition to their mindset beliefs, may have practical implications because of staff ideas about the causation of CB may influence staff's response to it (Hastings, 1997). A core feature of PBS is an understanding of all behaviour as functional and may, therefore, differ from other theoretical understandings of CB (Gore et al., 2013). Examinations of mindset liability while practising in a PBS framework remains unexplored in earlier studies. There has been no research regarding causal attribution in the context of PBS trained and practising staff in Norway.

Positive Behavioural Support

PBS is gaining momentum in Norwegian services for individuals with intellectual disabilities, both in public school settings as well as community-based settings. PBS has also established itself as part of curriculum in higher education in selected programmes in university colleges in Norway but is, at present, recognised as a fairly new approach for services in Norway (Berge, 2019).

PBS is a multi-element framework for developing an understanding of CB displayed by an individual, based on an assessment of the social and physical environment, and the broader context within which it occurs. This approach includes stakeholder perspectives and

4

involvement and using this understanding to develop, implement, and evaluate the effectiveness of a personalised and enduring system of support that enhances quality of life outcomes for the focal person and other stakeholders (Gore et al., 2013). PBS meets CB with an integrated approach of assessment and intervention that takes account of gene-behaviour relationships, predisposing risk factors, and immediate behavioural contingencies operating in care environments (Allen, 2009).

Attribution of Challenging Behaviour

Staff's attributional causations of CB are likely to change as a result of practical and theoretical training. Causal attribution may also be a factor that can be evaluated concerning impact on training and knowledge (Hastings, 1997). Hastings (1997) hypothesised that when undergoing successful training, staff place more emphasis on causality related to positive and negative reinforcement, rather than using biomedically and psychodynamically derived models. Hastings (1997) first developed the Challenging Behaviour Attributions Scale for facilitating research on staff perceptions of the causes of CB and measuring changes as an outcome of theoretical and practical training. A key element in PBS training is to educate staff about the internal and external factors that contribute to CB (Davies et al., 2015).

Earlier studies conducted internationally have found variable changes in attribution of causality of CB after PBS training using CHABA. McGill et al. (2006) found changes in causal attribution which they concluded were likely to be associated with generally beneficial changes, such as better staff performance, and better outcomes for people with intellectual disabilities. Grey et al. (2002) found in their study changes in staff attribution of CB to favour negative reinforcement and stimulation after training, and a reduction of positive reinforcement as a causal belief. Gore and Umizawa (2011) found in their study a significant decrease in participant rating of the emotional subscale between pre-training and post-training. Davies et al. (2015) found significant changes in attribution relating to the causality of CB for both qualified and unqualified staff. Although when Davies et al. (2016) did a replication of the Davies et al. (2015) study with their 6-month follow-up study, they found that changes in causal attribution were not maintained six months after training. Lowe et al. (2007) also found significant changes in staff attribution in their study, however when they

carried out a one-year follow-up, also they discovered that scores generally were returned to baseline levels, indicating the changes in attribution were short-lived (Lowe et al., 2007).

Implicit Theories and Mindset

People's beliefs about themselves can create different psychological worlds, leading them to think, feel and act differently in identical situations, is what Dweck (2000) calls self-theories. Implicit theories refer to the two different assumptions people may make about the malleability of personal attributes. One may believe that a personal attribute, such as intelligence or morality, is a fixed, non-malleable trait-like entity, and, thus, hold an entity theory. Or one may believe that the attribute is a malleable quality that can be changed and developed, which is an incremental theory (Dweck et al., 1995).

These patterns of assumptions may also affect people's belief in the potential to change. Dweck (2000) explains the belief about the potential to change is the very distinction of the entity versus incremental theory. If you have decided that someone has innate, fixed traits, you have also in advance decided what they can, and cannot, learn. This belief may dramatically affect what and also how you try to teach them (Brown, et al., 1984; Howards, 1995; Rosenthal & Jacobson, 1986; in Dweck, 2000). In contrast to this assertion, when you decide that someone is lacking skills and knowledge, or even severely lacking, you do not pass judgement on their potential for learning when holding an incremental theory. Rather you hold the belief that current lack of skills does not preclude future high skills. All though, in some cases, building skill may take tremendous time and effort (Dweck, 2000).

Implicit theories are also referred to as mindsets. When holding an entity theory, one has what is described as a fixed mindset. An incremental theory, on the other hand, is referred to as a growth mindset (Dweck, 2014). Dweck (2000) found that entity theorists, people with a fixed mindset, did not grant themselves, or others, the potential to grow. The subjects holding an incremental theory, a growth mindset, on the other hand, saw their failures, as well as others, as problems to be solved. They saw it as people could make mistakes, do harm to others, or "follow the wrong path", but at the same time, these same people are capable with the proper motivation and guidance of going beyond these wrongdoings.

Dweck's (2000) earlier work on mindsets has had an overall focus on theories of intelligence and motivation. The Norwegian Growth Mindset Measure (NGMM) (Svartdal, 2016) is based on Dweck's mindset theory, but here the emphasis is to seek to outline an individual's inclination to potential to change (Ingebrigtsen, 2018). The NGMM is a novel mindset measure created by Svartdal (2016) to measure a person's contextualised and operationalised implicit theories. It contains assumptions about mindsets with regards to either persist or give up after challenges, embrace or avoid challenges, think of effort as fruitful or fruitless, and examines whether a person would want to learn from feedback and criticism or rather would avoid the latter (Ingebrigtsen, 2018).

The present study

The present study aims to examine mindsets and attribution patterns, demonstrated by professionals, within and outside a theoretical framework of PBS with regards to CB. As discussed, this aim is based on earlier research demonstrating that both mindset beliefs and causal attribution of CB may have an impact on how staff go about their practice, which, in turn, may affect individuals receiving their services.

Specifically, the main objective of the present research is to investigate if PBS trained staff differs from staff practising under other executive theoretical frameworks with respect to mindset beliefs and their ideas about causal attribution of CB.

First, based on prior attribution research (Hastings, 1997), it was expected to find higher ratings of causal attributions related to learned behaviour and lower ratings of attribution related to emotional and biomedical causality in the PBS group as hypothesised in earlier studies (e.g. Hastings, 1997). This is based on the fact that PBS is based on applied behaviour analysis, and with successful training, it might be expected to see such a shift of causal emphasis (Hastings, 1997).

Second, it was also hypothesised that PBS trained staff would be more inclined to demonstrate an incremental view on the malleability of attributes due to the core features of PBS, such as developing skills as an alternative to CB (Allen, 2009). Therefore, the hypothesis is that the experimental group should demonstrate overall higher scores of growth mindset on the NGMM. These two measures will be used to try to elucidate if the

introduction of PBS to practice settings in Norway, in fact, differs from other theoretical and practical frameworks exercised in Norway with regards to staff's ways of thinking.

The third hypothesis of this study is that higher ratings of learned behaviour subscales in the CHABA might be related to higher scores of growth mindset on the NGMM for the sample overall, opposed to higher ratings on biomedical causation in the CHABA may be related to lower NGMM scores, indicating a fixed mindset. This, to investigate if patterns of attributional causation in the CHABA may represent elements of a growth mindset (i.e. "behaviour is learned, and can, therefore, develop and change") or a fixed mindset (i.e. "we are born in a certain way, and there is not much anyone or anything can do to change that") (Dweck, 2000).

Method

Participants

Participants consisted of 309 qualified staff (241 females, 66 males). Inclusion criteria were i) a minimum of a bachelor's degree or the equivalent, and ii) working directly with individuals with intellectual disabilities and CB, either in school settings or community-based settings. The sample consisted of an experimental group of PBS trained and practising staff (n=97), and a control group which consisted of staff reporting to practice in a various range of executive professional frameworks (n=212). The sample was divided into two age clusters, 22-45 (n=230) and 46-67 (n=79) years. The majority of staff had between 6-15 years of experience working with individuals with intellectual disabilities.

Ethical approval

Approval was not necessary from the Norwegian Centre for Research Data (NSD) because the study did not collect any directly or indirectly identifying data about the participants, which was confirmed by NSD.

Materials

Challenging behaviour attributions scale (CHABA)

CHABA contains a vignette describing a girl, "Sophie", displaying CB of an aggressive character (Hastings, 1997). The CHABA scale contains 33 causal explanations for the behaviour described, and participants were asked to rate them from "very unlikely" (1), "unlikely" (2), "equally likely/unlikely" (3), "likely" (4) to "very likely" (5). The CHABA contains seven sub-scales relating to seven causal models of CB dominant in the behavioural research literature - learned behaviour, both negative and positive, referring to positive and negative reinforcement processes; emotional causation, referring to beliefs that CB are related to emotional factors, e.g. anger; bio-medical, beliefs about causality related to biological or medical factors, e.g. because of medication; self-stimulation referring to self-stimulatory functions such as boredom; and physical environment meaning causality beliefs related to the physical environment provoking or maintaining behaviours (Grey et al., 2002; Poppes et al., 2016). Internal consistency for the total CHABA scale was α.89, and the alpha coefficient for the subscales were generally acceptable (α.65 - .76), although learned negative and learned positive subscales had slightly lower alpha values (α.51 - .59). When the alpha was calculated with learned as a total subscale, alpha value deems acceptable (α.70).

Norwegian Growth Mindset Measure (NGMM)

The NGMM is an alternative measure of implicit theories; a simple preference index adapted from assumptions about mindsets (Ingebrigtsen, 2018; Svartdal, 2016). The NGMM asks respondents to select the most appropriate of two alternatives in four scenarios (1) "When I fail at something: I see it as a possibility to learn more, OR It tells me that I am completely over my head"; (2) "When I succeed in something difficult: It confirms that I am clever, OR It reflects good effort"; (3) "Feedback and critique: Motivates me, OR I don't care much for it"; (4) "If there is something I don't master well: I quickly give up, OR I don't give up until I succeed" (Ingebrigtsen, 2018; Svartdal, 2016). Selections consistent with a growth mindset (underlined) are summed, with a maximum score of four, indicating a high degree of growth mindset.

Procedure

A questionnaire followed by a cover letter with a request to join the study and describing the study's purpose was sent to management of health and social service units responsible for services for citizens with intellectual disabilities in their respective municipality. Cover letter disclosed that participation in the study was voluntary. Managers were asked to distribute the questionnaire and cover letter to participants that qualified to join the study, to further safeguard the participants' anonymity.

There is no information available on to how many individuals the survey was distributed. Thus, there are no data available about the quantity or characteristics of staff choosing not to participate in the study. After one month, managers were asked to issue a reminder to staff to complete the questionnaire.

The questionnaire contained 30 causal explanations for CB, which participants were asked to rate the likeliness of. In this study three items from the original 33-item CHABA were removed due to lack of cultural and practical applicability in a Norwegian context, especially with regards to formal regulation of environmental pollutants (removed items no. 3, 13, and 17). Grey et al. (2002) also problematised this in their study. The CHABA scale and the vignette distributed was translated into Norwegian language with back-translation technique for assuring linguistic validity, as well as being piloted to 15 independent participants. Lastly, the participants were asked to consider four assumptive statements regarding scenarios from the NGMM where there were two options for each statement. They were further asked to choose the option that had in their opinion the best fit for describing themselves. In addition to the psychometric measurements, participants were also asked to give information on their age, divided into two clusters, sex, professional background, years of experience working with individuals with intellectual disabilities, explicit formal training in working with CB, and their executive professional framework.

The survey was distributed, and data collected electronically using Qualtrics XM survey software. Data were analysed using IBM SPSS Statistics version 25, and graphic content retrieved from Statistica.

Results and discussion

Descriptive statistics and scale properties

Table 1 shows correlations between the derived subscales of CHABA for the overall sample (N=309, mean=3.545, SD=0.423). The data presented indicate moderate to high positive correlations between the subscales (from r.38 to .86). These results are consistent with Hastings' (1997) findings. The strongest relationships in this sample, except for learned, were found between subscales *physical environment* and *biomedical* (r.63), and *stimulation* and *physical environment* (r.65) subscales. Ratings of *biomedical* and *learned positive* were found as being least related in this sample (r.38). All correlations fell at or below the 0.001 level of probability, indicating that the weakest correlations were nonetheless significant.

Table 1 Correlations (Pearson's r) between CHABA subscale scores; EMOSUB=emotional, BIOSUB=biomedical, STISUB= stimulation, LEASUB= learned, LPSUB= learned positive, LNSUB= learned negative

	EMOSUB	BIOSUB	STISUB	PHYSUB	LEASUB	LPSUB	LNSUB
EMOSUB							
BIOSUB	,549**						
STISUB	,496**	,561**					
PHYSUB	,593**	,635**	,657**				
LEASUB	,533**	,475**	,538**	,546**			
LPSUB	,487**	,385**	,396**	,406**	,867**		
LNSUB	,447**	,444**	,542**	,545**	,883**	,532**	

** Correlation is significant at the 0.01 level (2-tailed).

CHABA scores

Figure 1 shows the CHABA subscale ratings of aggressive behaviour in both the PBS-group and the control group, $F_{(7,791)}=1.17$, $p=.31$. The figure demonstrates that there were no significant differences in subscale ratings between the two groups. The figure further demonstrates that both of the groups mostly regarded all the subscales to be potential causal variables of aggressive behaviour, although in both groups there were slightly more inclination to ratings of negative reinforcement and slightly less towards ratings of biomedical causes and lack of stimulation. Furthermore, the figure shows that none of the groups were limited to fully endorse or fully dismiss any of the variables as causal explanations for aggressive behaviour. Inspection of Figure reveals that the two specific predictions, i.e., that the PBS group should demonstrate higher causal attribution related to learned behaviour, and lower ratings of attribution related to emotional and biomedical causality, did not receive support. This result, as the PBS group demonstrated, scores very similar to the control group on these measures. If anything, tendencies were in the opposite direction.
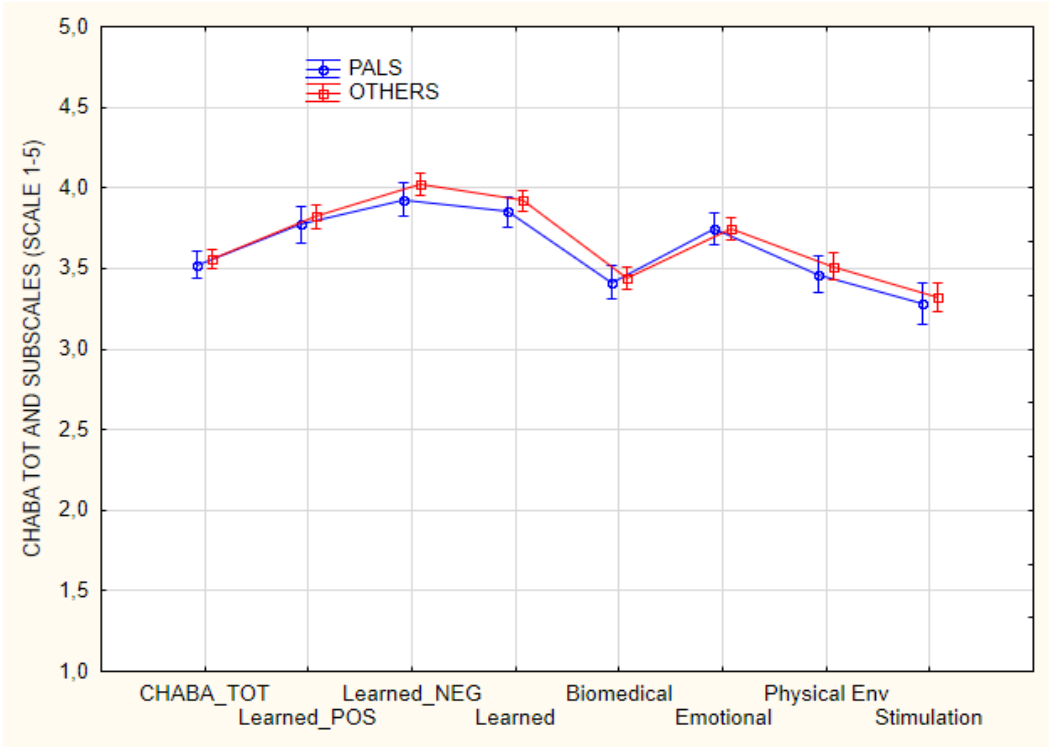

Figure 1 CHABA mean subscale ratings for PBS group (blue) and control group (red).

12

NGMM scores

Participant mindset ratings were negatively skewed in both groups, indicating participants overall tended to demonstrate a high degree of a growth mindset (mean=3.501, SD=.789). No significant differences in NGMM measure appeared between the PBS and control groups, Mann-Whitney U=9805.5, *p*=.60. Thus, in this research sample, participants were more susceptible to hold a growth mindset overall, regardless of executive professional frameworks, but also in terms of profession, age, gender, experience or explicit formal training.

CHABA ratings and mindset measures

The assumption that different scores of NGMM levels (0-4) are associated with differences in causal attributions was also explored. As seen in Figure 2, this appeared not to be the case. An ANOVA with CHABA scores as the dependent variable and NGMM levels (1-4) demonstrated a nonsignificant effect of NGMM, F(14.784), =.80, *p*=.66. As demonstrated in Figure 2, it cannot be concluded that mindset scores appear to affect CHABA ratings. All though, there are few respondents with scores indicating a fixed mindset, the hypothesis of low NGMM scores and inclination to rate biomedical causality are in this sample rebutted, as the participants with low NGMM score <2 rate biomedical causality slightly lower than the participants with higher >2 NGMM scores.
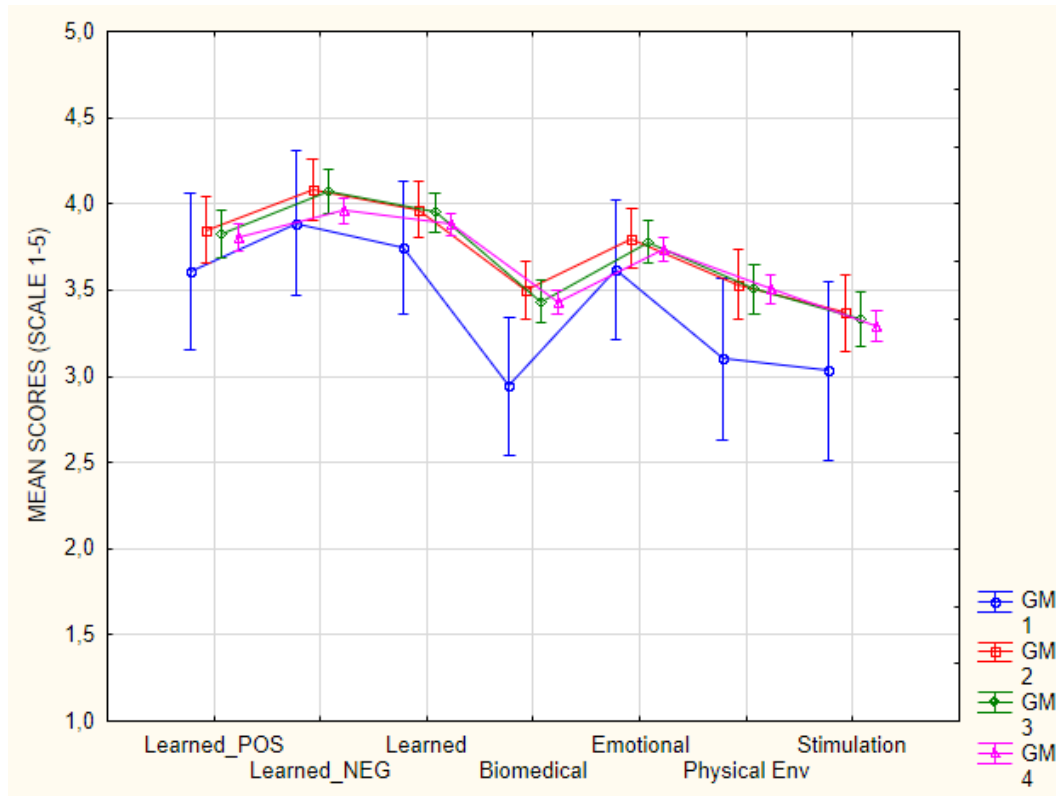
Figure 2 Means of CHABA subscale scores over different levels of NGMM scores for the whole sample (n=309). Note: Very few participants demonstrated NGMM=1

Discussion

This study aimed to examine professionals', within and outside a theoretical framework of PBS, mindsets and attribution patterns towards CB. The aim was to elucidate whether PBS trained staff, in fact, differs from staff practising with other executive theoretical frameworks concerning mindset beliefs and their ideas about causal attribution of aggressive behaviour. The aim was based on earlier research that concluded that mindset beliefs and causal attribution implicated both the professional's practice and the experience of individuals receiving services (Canning et al., 2019; Gutshall, 2013; Hastings, 1997). The research was both inspired from these findings, but also by the status of PBS recently establishing itself in Norway, and, thus, there has been fairly limited research conducted in Norwegian learning and welfare settings (Berge, 2019).

The results from this research sample showed no significant difference between the PBS group and control group in patterns of attribution of aggressive behaviour. They were

14

equally inclined to attribute aggressive behaviour to a wide variety of causal explanations. The hypothesis derived from Hastings' (1997) initial work on attribution of CB and the development of the CHABA were in this sample not supported with regards to PBS trained staff attributing increasingly towards causality within the subscales of learned behaviour. Further, it was hypothesised that the control group could be more inclined to attribute in the direction of biomedical and emotional causality. Such tendencies were not detected in this study. Both groups rated all causality from neutral belief in the subscales (a measure of 3) or endorsed the causal models (measure of >3). This is contradictory to research conducted by McGill et al. (2007), which suggested that PBS training made participants less likely to attribute CB to emotional causality. This was also the findings of Gore & Umizawa (2011), where there was a significant decrease of emotional subscale ratings between pre-training and post-training in PBS, although there were no significant differences in measures of the other subscales. Wardale et al. (2014) found increased endorsement of causality related to learned negative and learned positive subscales, but no changes in the attribution of the emotional subscale.

This study's findings, the other hand, confirms MacDonald et al.'s (2018) findings, which found no significant changes in attribution from pre-training to post-training, or in the six-month follow-up, after participants received one year of training in PBS. In Davies et al.'s (2015) study, they did not uncover any decrease in internal causation, such as emotional and biomedical ratings, however they rather found an increase in biomedical causation after PBS training. Davies et al. (2016) conducted a replication of the Davies et al. (2015) study, and their findings revealed an increase in emotional causation in the new research sample. They also reported a return to baseline levels after six months. Lowe et al. (2007) concluded in their study that staff training in PBS had little effect on attribution, where findings uncovered a small attributional change from baseline to T2, but such changes reverted to baseline levels at T3. Lowe et al. (2007) suggests changes in attribution patterns after training are short lived. This factor might be a consideration in this study, as there are no data available for when PBS trained staff conducted training, which may reflect the absence of divergence between the PBS group and the control group if the training was not recently carried out. There are also no data with regards to the duration and content of PBS training. Another consideration is that a large portion of the control group, 130 participants, stated an executive framework of practice as applied behaviour analysis (ABA). This fact may influence the results, as Hastings (1997)

explains change in attribution as an effect of staff training may be related to training derived from models based on ABA.

Training may affect patterns of attribution in groups of staff. Although, when PBS, as a framework emphasises, as described by Allen (2009) both gene-behaviour relationships, predisposing risk factors, and immediate behavioural contingencies, the PBS group may not be repellent of the fact that the aggressive behaviour described in the vignette may have a wide variety of causes, as information about the individual described is limited. On the other hand, this does not explain the equivalence of control group ratings of CHABA. Grey et al. (2002) suggest that the vignette method may lack ecologic validity, and notes that the use of vignettes may elicit different causality than made with an actual patient, service user, or pupil. The lack of information sources from the vignettes, e.g. variance of behaviour, constraints imposed on the behaviour, the effects of the behaviour, and lastly the personal impact on the observer, may be of influence of the way staff attribute under such settings. It is further suggested that interpretation of data drawn from vignettes may be difficult to support (Grey et al., 2002). Although participants were asked to take account for the lack of information while rating the vignette scenario, the vignette used in this study may represent a limitation.

The second hypothesis under investigation in this study was that the PBS group might be more inclined to a growth mindset, given key features of PBS as a theoretical framework are representative of an incremental view on the potential to change. This hypothesis was in this research sample barred, as the sample as a whole had tendencies leaning towards a growth mindset overall. Thus, there were no significant differences between the PBS group and the control group. Based on these findings, there are no data to support that training in a PBS theoretical framework has influenced practitioners in the PBS group's implicit theories, nor do the control group stand out in any way. There has been no earlier research conducted on mindset inclination of PBS trained staff, in Norway or globally. There is also limited data in this research sample to hypothesise any tentative theories about why the overall sample tend to a growth mindset, and research sample is deemed too limited to claim any larger tendencies apart from the data collected from this particular sample.

The last hypothesis explored in this study was to investigate whether higher ratings towards learned behaviour or elevated ratings towards biomedical causation on the CHABA scale was related to high and low scores on the NGMM. The initial hypothesis was based on the idea of causation of either learned behaviour or biomedical causation of the CHABA

16

might be related to growth or fixed mindset on the NGMM scale. In this sample, no such relationships were revealed. The sample, as a whole, represents conform ratings in scores respectively in the CHABA and NGMM. In samples with larger variation within respondents, there may be more apparent tendencies. There may be limitations concerning respondent's homogeneity in this research, concerning age, gender, and level of education.

There are no earlier studies conducted in this area of research and ought to be considered as novel ground. Further research may benefit from the recruitment of a more diverse sample. Further research in the overall field of PBS in Norwegian settings is encouraged.

References

Allen, D. (2009). Positive Behavioural Support as a Service System for People with Challenging Behaviour. *Psychiatry*. **8**(10), 408-412. doi: 10.1016/j.mppsy.2009.07.001

Berge, U. (2019). *Personal communication*. March 6th, 2019

Canning, E.A., Muenks, K., Green, D.J., & Murphy, M.C. (2019). STEM Faculty who Believe Ability is Fixed Have Larger Racial Achievement Gaps and Inspire Less Student Motivation in Their Classes. *Science Advances*. **5**(2), eaau4734. doi: 10.1126/sciadv.aau4734

Carr, E.G., Horner, R.H., Turnbull, A.P., Marquis, J., Magito-McLaughlin, D., McAtee, M.L, et al. (1999). *Positive Behavior Support for People with Developmental Disabilities: A Research Synthesis*. Washington, DC: American Association on Mental Retardation.

Chan, D.W. (2012). Life Satisfaction, Happiness, and the Growth Mindset of Healthy and Unhealthy Perfectionists Among Hong Kong Chinese Gifted Students. *Roeper Review*. **34**(4), 224-233. doi: 10.1080/02783193.2012.715333

Davies, B., Griffiths, J., Liddiard, K., Lowe, K. & Stead, L. (2015). Changes in Staff Confidence and Attributions for Challenging Behaviour After Training in Positive Behavioural Support Within a Forensic Medium Secure Service. *The Journal of Forensic Psychiatry and Psychology*. **26**(6), 847-861. doi: 10.1080/14789949.2015.1072.574

Davies, B., Griffiths, J., John-Evans, H., Lowe, K., Howey, S. & Artt, A. (2016). Changes in Staff Confidence and Attributions for Challenging Behaviour After Training in Positive Behavioural Support, Within a Forensic Mental Health Setting: A Replication Study with Follow-up. *The Journal of Forensic Psychiatry and Psychology*. **27**(6), 886-906. doi: 10.1080./14789949.2016.1222448

Dweck, C.S., Chiu, C.Y. & Hong, Y.Y. (1995). Implicit Theories and Their Role in Judgments and Reactions: A World from Two Perspectives. *Psychological Inquiry*. **6**(4), 267-285.

Dweck, C.S. (2000). *Self-theories: Their Role in Motivation, Personality, and Development*. New York: Psychology Press.

Dweck, C. S. (2014). Teachers' Mindsets: Every Student has Something to Teach Me. *Educational Horizons*. **93**(2), 10-15.

Gore, N.J. & Umizawa, H. (2011). Challenging Behavior Training for Teaching Staff and Family Carers of Children with Intellectual Disabilities: A Preliminary Evaluation. *Journal of Policy and Practice in Intellectual Disabilities*. **8**(4), 266-275.

Gore, N.J., McGill, P., Toogood, S., Allen, D., Hughes, J.C., Baker, et al. (2013). Definition and Scope for Positive Behaviour Support. *International Journal of Positive Behavioural Support*. **3**(2), 14-23.

Grey, I.M., McClean, B. & Barnes-Holmes, D. (2002). Staff Attributions About the Causes of Challenging Behaviours. Effects of Longitudinal Training in Multi-Element Behaviour Support. *Journal of Learning Disabilities*. **6**(3), 297-312.

Gutshall, A.C. (2013). Teachers Mindset's for Students with and without Disabilities. *Psychology in the Schools.* **50**(10), 1073-1083.

Hastings, R.P. (1997). Measuring Staff Perceptions of Challenging Behaviour: The Challenging Behaviour Attributions Scale (CHABA). *Journal of Intellectual Disability Research.* **41**, 495-501.

Ingebrigtsen, M. (2018). *How to Measure a Growth Mindset: A Validation Study of The Implicit Theories of Intelligence Scale and a Novel Norwegian Measure* (Master's thesis, University of Tromsø). Retrieved from https://munin.uit.no/bitstream/handle/10037/12904/thesis.pdf?sequence=2&isAllowed=y

Kincaid, D., Dunlap, G., Kern, L., Lane, K.L., Bambara, L.M., Brown, F., et al. (2016). Positive Behavior Support: A Proposal for Updating and Refining the Definition. *Journal of Positive Behavior Interventions.* **18**(2), 69-73. doi: 10.1177/1098300715604826

Lowe, K., Jones, E., Allen, D., Davies, D., James, W., Doyle, T., et al. (2007). Staff Training in Positive Behaviour Support: Impact on Attitudes and Knowledge. *Journal of Applied Research in Intellectual Disabilities.* **20**, 30-40. doi: 10.1111/j.1468-3148.2006.00337.x

MacDonald, A., McGill, P. & Murphy, G. (2018). An Evaluation of Staff Training in Positive Behavioural Support. *Journal of Applied Research in Intellectual Disabilities.* 1-16. doi: 10.1111/jar.12460

McGill, P., Bradshaw, J. & Hughes, A. (2006). Impact of Extended Education/Training in Positive Behaviour Support on Staff Knowledge, Causal Attributions and Emotional

Responses. *Journal of Applied Research in Intellectual Disabilities*. **20**, 41-51. doi: 10.1111/j.1468-3148-2006.00338.x

Poppes, P., Van der Putten, A.A.J., Ten Brug, A. & Vlaskamp, C. (2016). Staff Attributions of

the Causes of Challenging Behavior in Children and Adults with Profound Intellectual and Multiple Disabilities. *Research in Developmental Disabilities*. **48**(1), 95-102. doi: http://dx.doi.org/10.1016/j.ridd.2015.10.014

Svartdal F. (2016). Norwegian Growth Mindset Measure.

Wardale, S., Davis, F., Carroll, M. & Vassos, M. (2014). Outcomes for Staff Participating in Positive Behavioural Support Training. *International Journal of Positive Behavioural Support.* **4**(1), 10-23.

2 Supplementary enclosure

2.1 Introduction

As part of this master's thesis, this supplementary enclosure will disclose theoretical weightings of the research project conducted. The choice to emphasise the theoretical perspectives in this text has its background in the programme description of Citizenship and Co-operation, where one of the aims of the thesis course is demonstrating the ability to argue the thesis' relevance in both a societal and scientific context, as well as within the programme's core curriculum. As this thesis is conducted as a scientific article, the space to highlight theoretical considerations and opportunity to elucidate implicit features of the study with regards to the programmes' features is, by the nature of the format, limited. When conducting research, redundancy of commentary is highly bounded. The connection between the chosen research subject and the key elements of the master's programme, might be deemed insufficiently accounted for in the article when seen as a single element. The other aims and learning objectives of the course, remains more explicit in the article. Aims and objectives such as knowledge of the chosen scientific method as well as choosing an adequate design, data extraction and adjoined analysis method, and further critical evaluation of these, are assayed demonstrated in the method and results chapters of the article. Objectives on knowledge of international and domestic research as well as relating this research to one's own and the critical appraisal of such, is made accounted for in both the introduction chapter and in the discussion chapter. The aim regarding the conduct of a research project under supervision, as well as identifying and managing ethical considerations with regards to research ethics were aspired to be sufficiently demonstrated in the article. Elaboration of these subjects would still certainly be desirable. Especially with regards to methodological considerations, such as choice of method, description of the experiences of conducting of a research pilot, conducted analysis' and research ethics. Although when assessing which part of the aims and objectives of the course had not been explicitly accounted for in the article, it was the link between the research project and citizenship that had had the least light shed on it.

The following text will endeavour to make the connection between the conducted research and active citizenship more of an explicit relationship. It will be attempted to show how positive behavioural support (PBS) can be seen in a perspective of application of active citizenship theory in praxis, and how implicit theories and attribution patterns may either aid or hamper service user's, and other individuals we encounter as health professionals, attain of such. Second, central theories of citizenship will be presented, and the origins, emergence and features of PBS will be described in-depth. Thereafter, PBS as a tool for the promotion of active citizenship will be further explained. Lastly, implicit theories and attribution theory will be further accounted for, and furthermore the rationale of these two elements combined with citizenship will be disclosed. With regards to the limitations of this text, some subjects deserving of a broader elaboration, will unfortunately only be accounted for in a briefer extent than desirable.

2.2 Citizenship

The language of citizenship is used in a multitude of contexts, such as legal, political, philosophical and academic contexts, and a universally agreed upon definition is described as virtually impossible (Lister, 1998a, in Dwyer, 2010; Oliver & Heater, 1994, in Dwyer, 2010). A theory of citizenship from an essentially liberal stance, stressing the importance of individual rights, may be seen as having different aims from a communitarian approach to citizenship, which places emphasis on the individual's obligation and commitment to the wider community. Citizenship remains as a much discussed and highly contentious concept (Dwyer, 2010). T.H. Marshall (1949, 1992, in Dwyer, 2010) outlined citizenship theory where he linked the three items of civil rights, meaning the rights to equality in law, and right to liberty; political rights, such as the right to vote and to participate in political processes; and social rights referring to the right to welfare and full participation in society as central importance. Also, the common equality of status with other members of a shared community was emphasised by Marshall (ibid), irrespective of class or position. Withholding of such rights, would in turn lead to marginalisation. According to Marshall (ibid), citizenship does not only entail rights, but also duties and responsibilities, and further that citizenship as a status are dedicated upon those who are full members of society. Furthermore, Marshall (ibid) notes that there is no universal principle determining what those rights and duties should be,

24

but in the societies which citizenship is a developing institution, an image of an ideal of citizenship can be created, which in turn achievement can be measured, and aspiration can be directed towards (Marshall, 1949, 1992, in Dwyer, 2010). Oldfield (1990, in Dwyer, 2010), on the other hand, describes citizenship as a concept where the relationship between citizenship as a status, meaning the enjoyment of the earlier discussed rights, and as a practice, with regards to the requirement of acceptance and performance of wider communal responsibilities and duties, as key issues. Oldfield's (ibid) dichotomy reflects the traditions of citizenship; liberalism and communitarianism (Dwyer, 2010).

2.3   The origins, emergence and intellectual roots of positive behaviour support

The decade of the 1980s was a period of significant advancement in conceptualizing how services should be organized and provided to persons with disabilities. The deinstitutionalization movement began in this period in North America, with the civil rights movement as a driver, with national discontent with congregate settings such as large public institutions for "mentally retarded". While this movement began to gain momentum, there was, on the other hand, also significant progress in treating severe behavioural disorders with scientifically verified methods. Researchers in the expanding field of applied behaviour analysis (ABA) reported remarkable success in treating a range of debilitating manifestations of disability. This being behaviours such as aggression, self-injurious behaviour, sexualized behaviour, and other wide problems considered sufficient grounds to cause people to be remaining institutionalized if such behaviour emerged in such a context. Described as "behaviour modification", many of the published successes involved systematic applications of contingent punishers. The two movements in the disability field - deinstitutionalization and civil rights, at one hand, and behaviour modification and use of aversives at the other, clashed in what is described to be a conceptual paradox which put these two movements on collision course (Dunlap, Sailor, Horner & Sugai, 2011). Furthermore, in the scientific literature in the 80s, values clash over the legitimacy of the use of aversives. Guess, Helmstetter, Turnbull and Knowlton (1987, in Dunlap et al., 2011) described the debate, and resultant controversy erupting, as a major paradigm crisis in applied science. There was new research emerging,

casting doubt over the effects of using punishers, which was critical towards the use of highly intrusive consequence-based interventions in schools, as well as community-based settings derived from behaviour modification. An immense contribution, as a contradiction to behaviour modification, on research and conceptual perspectives on the occurrence of aberrant behaviour and under which circumstances, came from special educators and behavioural psychologists during this period (Donnellan, Mirenda, Mesaros & Fassbender, 1984; Carr, 1977; Iwata, Dorsey, Slifer, Bauman & Richman, 1982; all in Dunlap et al., 2011). This led to the technologies of functional analysis and functional assessment, which is currently an essential foundation of positive behaviour support.

2.3.1 Establishing PBS

Positive behaviour support was first established as a term in in Horner, Dunlap, Koegel, Carr, Sailor, Anderson, Albin, & O'Neill's (1990) classic article "Toward a Technology of "Nonaversive" Behavioural Support", listing PBS's ten key features: i) Emphasis on lifestyle change, ii) functional analysis iii) and multicomponent interventions. iv) Manipulation of ecological and setting events, and v) emphasis on antecedent manipulations. vi) Teaching adaptive behaviour, vii) building environments with effective consequences and viii) minimizing use of punishers. And ix) distinguishing emergency procedures from proactive programming and x) social validation and the role of dignity in behavioural support.

2.3.2 A brake away movement

At first the focus of PBS was towards individuals with severe disabilities whose characteristics were associated with histories of aversive interventions. PBS as an approach came sooner to encompass a large variety of individuals and groups with behavioural challenges (Dunlap et al., 2011). Although PBS originally was a breakaway movement from applied behaviour analysis at the time, ABA and PBS still share the same core which is based on Skinnerian radical behaviourism and operant conditioning (Skinner, 1957, in Singer & Wang, 2011; Singer & Wang, 2011). The background for the eruption from ABA was based on moral revulsion over aversive treatment developed by prominent behaviour analysts

26

(Singer and Wang, 2011). Singer and Wang (2011) describes that PBS differed originally from ABA in two major respects: i) The foundational belief that there are effective positive alternatives to aversive treatments, and therefore it is immoral to use harsher methods (Singer, Gert & Koegel, 1999, in Singer Wang, 2011; Turnbull, Wilcox, Turnbull, Sailor & Wickham, 2001, in Singer & Wang, 2011) and ii) the commitment to use behavioural interventions to not only change discrete target behaviours, but also have a broader impact by improving quality of life of PBS intervention recipients. Latest evolvements of PBS also include the ideas about normalization, self-determination, contextual fit, comprehensive service designs, and family member - professional partnerships (Carr et al., 2002, in Singer & Wang, 2011). According to Singer and Wang (2011) PBS emerged out moral concerns as well as the appreciation of the complexity of addressing the context in which microsocial behaviour occurred. Two major philosophical roots influenced these two lines of thought: Bernard Gert's moral rules analysis and justification of moral rules (2005, in Singer & Wang, 2011), and Stephen Pepper (1948, in Singer & Wang, 2011), which was strongly influenced by American pragmatists such as John Dewey, and the pragmatic contextualism of Biglan and Hayes (1995, in Singer & Wang, 2011).

2.4 Core features of positive behaviour support

Positive behaviour support uses changes in quality of life as an intervention, but also as an outcome measure, whereas achieving reduction of challenging behaviours is seen as a bi-effect of enhanced quality of life (Allen, James, Evans, Hawkins, & Jenkins, 2005). PBS' focus on quality of life outcome, is consistent with quality of life as a conceptual model, described by Schalock, Verdugo, Gomez and Reinders (2016). Schalock et al. (2016) notes that key concepts of quality of life, as understood and applied, includes values related to equity, empowerment, self-determination and inclusion (Schalock & Verdugo, 2012 in Schalock et al., 2016). As well as values, the individualized nature of quality of life needs to be taken into consideration, e.g. what the person contributes to bringing about change, and what person-centred support and opportunity provided to facilitate quality of life (Schalock et al., 2016). Moreover, Schalock et al. (2016) discusses the need for quality of life to be discussed in dialog with the focal individual (Reinders & Schalock, 2014, in Schalock et al., 2016), personal development need to be seen not only as an outcome, but also as part of the

process of obtaining higher quality of life (Sen, 1999, in Schalock et al., 2016), and the integrated fact that no one is excluded from processes of enhancement of quality of life on the basis of cognitive impairments and disability (Brown et al., 2013; Mansell & Beadle-Brown, 2012; Nussbaum, 2006, 2009; all in Schalock et al., 2016). In continuation, PBS is values led (Allen, et al., 2005). PBS has expanded its approach to social validity, due to recent discourse concerning lack of voice and participation of stakeholders in both process and planning. The use of humanistic values to inform empiricism and the suggestion of behaviour worth intervening, comes from the viewpoint of the focal person and stakeholders, rather than merely the perspective of the professional service providers (Singer & Wang, 2011). The history of welfare in western society involves a division between service users and the professionals delivering the service, where users were seen as the passive recipients of care, rather than active participants. The cooperative approach in PBS may represent a significant shift from a traditional approach of paternalism to partnership (Dalrymple & Burke, 2006). This is in line with Lid's (2017) analysis of Nussbaum's (2007, in Lid, 2017) political theory of justice in the modern Scandinavian welfare state, where it is stated that the focal persons and their next of kin, relatives or other people close to the person should have the opportunity to influence how and when service is provided, and in which context. Lid (2017) further explains that the focal person shall have to opportunity to develop one's own "voice" and perspective. This approach to the professional - client partnership is also one of PBS's distinguishing features (Carr et al., 2002, in Singer & Wang, 2011). The attitudes and behaviours in this dynamic is to establish trusting partnerships, and includes being non-judgemental, being reliable, consistent, open and honest, as well as expressing courteousness, honesty, being flexible and open to explore all options. Further listening to and being sensitive to family's needs and emotions, communicating positively and being easily accessible makes the traditional expert – client relationship less hierarchical and needs to be established with PBS recipients (Blue-Banning, et al., 2004, in Singer & Wang, 2011).

2.4.1 Overall goals

The goals of behavioural strategies, overall, are the achievements of enhanced personal choice and personal competence, respect, enhanced community presence and community participation, in divergency to behavioural change in isolation (Allen et al., 2005). PBS

reduces or eliminates the overall use of punishing approaches, and leads focus to altering immediate contingencies to prevent the likelihood of challenging behaviour to occur. This means, that in PBS one bases the understanding of challenging behaviour on why it happens, when and how, but one also focuses on the purpose such behaviours serve. This is done by the use of functional analysis. As the development of challenging behaviours often emerges from lack of appropriate skills, building of such critical skills is therefore a key intervention in PBS. Further, PBS has a long-term focus, and is not a single-component intervention. This has its background in the understanding of challenging behaviour often are of a long-term nature and interventions may need to be maintained over a prolonged period of time (Allen, et al., 2005). It is also consistent with the opportunity to facilitate attachment in relationships with helpers, as Lid (2017) emphasises the meaning of living lives directed towards the other, with regards to Nussbaum's (2007) capability approach. The multi-component focus in PBS reflects the understanding of the fact that challenging behaviours often are multiply determined, and often displayed in multiple forms. It is acknowledged that even the most effective strategies may not completely eliminate risk behaviours from behavioural repertoires. Therefore, a key feature of PBS is the application of proactive strategies for changing behaviour and enhancing life quality, but also planned reactive strategies for managing challenging behaviour associated with risk if and when it occurs (Allen et al., 2005).

2.5   Positive behaviour support as a tool to promote active citizenship

As describes earlier in this enclosure, citizenship can be seen as a three-legged stool, consisting of civil, political and social rights (Twine, 1994, in Dwyer, 2010). Marshall (1949, 1992, in Dwyer, 2010) brought about the establishment of citizenship centred around universal rights of citizens, and the assertion that social citizenship would ensure inclusion and full participation of members of society (Morris, 1998, in Dwyer, 2010). Social citizenship offers the capacity for the exploration of dynamics of social division and exclusion, and in turn to take in important dimensions such as disability when assessing levels of inequity within a society, but also regarding the causes of such (Dwyer, 2010). PBS's focus

on quality of life, emerges from the fact that a good quality of life is currently not available for many people in our society, maybe especially vulnerable, if you will, people like people with intellectual disabilities. One can commonly hold it as a sign of a civilized society when individuals who are not considered to be moral agents are fully protected by moral rules. People who are not considered as moral agents, but who deserves protection of moral rules have historically been highly vulnerable to mistreatment. In PBS it is emphasized that extra vigilance is needed to protect people with severe disabilities due to their protection from moral rules are fragile, and needs to be carefully safeguarded. PBS argues that use of aversive procedures, as well as overlooking quality of life factors, sets these individuals at risk of dehumanization, a fate which the individuals with disabilities have suffered many times throughout the history of western civilization (Singer & Wang, 2011; Winzer, 1994, in Singer & Wang, 2011).

2.5.1 Quality of life and inclusion

Many individuals with intellectual disabilities are obstructed of living normal lives and enjoying common rights and benefits of society available to most people. PBS centres the ambitious goal of improving major elements of life quality for the people it serves. The importance of this is emphasised due to the relationship between a desirable quality of life and the history of denial to access it for many people with intellectual disabilities. Many people with intellectual disabilities also depend on highly constrained service agencies for many necessities, and are often provided with very limited choices of where to work, what to eat, where they can travel and to whom they interact and recreate with. In short these are lives in which personal choice is highly unavailable. PBS aims to prevent the typical imbalances in power relationships between professionals and the service recipient, and educating individuals so they have the skills to pursue their own goals (Singer & Wang, 2011). People with intellectual disabilities with the need for support, have been seen as more dependent and thus, less autonomic when seen in light of traditional theories of social and political justice, such as social contract theories (Lid, 2017; Nussbaum, 2007, in Lid, 2017). Individuals with intellectual disabilities has to a lesser degree been included in the understanding of citizenship and whom the citizen is (Lid, 2017). The capabilities approach, a justice theory developed by Nussbaum and Sen, includes disabilities and need for support explicitly. The emphasis here is

not on the individuals' capacity, but rather emphasis is placed on opportunity. Nussbaum's model gives specific suggestions for how societies aspiring to be just may facilitate equality and citizenship through inclusion and opportunity for participation (Lid, 2017). Dwyer (2010) points out that mainstream society's failure to fully considering the needs of individuals with impairment, in turn denies people with disabilities their citizenship rights. According to Barnes & Oliver, (1995, in Dwyer, 2010) citizenship rights for individuals with disabilities firmly remains in rhetoric rather than reality. The long faced institutionalised discrimination in most areas of disabled individual's lives, through enforced segregation and hostile environments, individuals with disabilities has effectively been denied rights central to the notion of citizenship (Barnes, 1991, 1992; Barnes et al., 1999, all in Dwyer, 2010). PBS aims to promote social inclusion, but the concept of social inclusion has also been critiqued. The lack of defining social inclusion, is usually taken to mean normal levels of participation in society i.e. the opposite of exclusion (Cameron, 2005, in Hall, 2010). Broader structural factors are obscured, and focus overall is placed on the excluded individuals when not defining what inclusion really is, and paying no attention to what people are being included into. Social inclusion then becomes about a set of normative practices, rather than the transformation of society (Cameron, 2005, in Hall, 2010). Bauman (1998, in Hall, 2010) recons social inclusion as an exercise in normative boundary setting, where social exclusion means to be an exception.

2.6 From world views and modes, to implicit theories and mindsets

Implicit theories are built around the idea that people develop beliefs that organize their world and give meaning to their experiences, Dweck (2000) refers to this as the "meaning system" approach. This points towards that different people create different meanings systems, with regards to their beliefs about themselves and further the creation of different psychological worlds. The creation of meanings systems; ideas about people's beliefs or theories forming a system has, according to Dweck (2000), a reverend history in both psychology and philosophy. This forms the basis of much of the existing work in several fields of psychology, such as social-personality psychology, cognitive psychology, cross-cultural psychology,

developmental psychology – including social development and cognitive language development, and areas within clinical psychology (Dweck, 2000). Social psychologists Heider (1958, in Levy, Plaks & Dweck, 1999) and Kelly (1955, in in Levy, Plaks & Dweck, 1999) recognized that in peoples social understanding, lay theories play a pivotal role. Generally unconscious and unarticulated, such implicit theories contain key assumptions that can underlie different patterns of social information processing. Whitehead (1929; 1938 in Levy, Plaks & Dweck, 1999) proposed a metaphysical system, where one, the static world view, lead naturally to the desire to measure enduring properties and the creation of taxonomies based on them. The other, the dynamic world view, would lead to the desire to understand, analyse and influence underlying processes of these dynamic systems. Whitehead (ibid) proposed this distinction to apply to both scientists seeking to know the world of what they study, but also as to laypeople seeking to know the world which they live, their social world (Levy, Plaks & Dweck, 1999). Such fundamentally different perspectives on human nature are likely to generate fundamentally different mental models about the human function, and thus very different about views on what information is needed in order to predict and understand human behaviour (Levy, Plaks & Dweck, 1999). The static mode, is more organized around traits, seeking trait information, viewing traits as causes of behaviour, categorising people by traits, and lastly drawing trait-centred inferences. The dynamic mode, organises around more dynamic psychological mediators such as people's needs, goals and states of mind, and while operating in this mode they tend to analyse and understand people in terms of these processes (Levy, Plaks & Dweck, 1999). These modes, have today come to be known as implicit theories, or mindset's (Dweck, 2000). The two implicit theories generate distinct and coherent mental models that makes up distinct patterns of processing social information and social judgement (Levy, Plaks & Dweck, 1999). This may have implication for practice: besides predicting differences in attribution and social judgements, implicit theories also predict differences in the generation of course of action, decision making, and the behaviours they display towards others. This implicates that implicit theories do not only appear to have consequences for how others are judged, but also for how they are likely to be treated (Levy, Plaks & Dweck, 1999).

2.6.1 Implicit theories research

A wide range of research regarding mindset interventions and consequences of social judgement of individuals have been conducted. The use of mindset interventions to elevate and promote vulnerable individuals and groups have had the overall focus of provision of better conditions through promoting growth and development to people who have suffered from stereotype threat and lack of equal access in a variety of welfare and education settings, and to providers of such. As Young and Quibell (2000) argues, social inequities stem from lack of understanding and appreciation to any degree of complexity. Research in the field of implicit theories, such as promotion of empathic effort in intergroup interactions with members of society with conflicting socio-political issues, and ethnic outgroup members (Schumann, Zaki & Dweck, 2014); preferences for stereotypic versus counter-stereotypic information (Plaks, Stroessner, Dweck, & Sherman, 2001): prejudiced behaviour in inter-ethnic interactions (Carr, Dweck, & Pauker, 2012); ethnic minority achievement gaps (Canning, Muenks, Green & Murphy, 2019); judgments and attitudes towards individuals with Down's syndrome (Enea-Drapeau, Carlier & Huguet 2017); desire for social distance and stigmatisation of individuals with mental illness' (Lyndon, Crowe, Wuensch, McCammon & Davis, 2016); teachers view of student disabilities (Gutshall, 2013); and stigmatising labels of students with disabilities (Lapadat, 1998) are a few conducted studies emphasising the importance of mindset's and social justice. The mindset approach in research is consistent with Young and Quibell (2000) emphasis on the individual's right to flourish, where a sole focus on rights having tangible limits as a strategic tool for social change. People with disabilities are vulnerable against excluding attitudes (Lid, 2015), and exploring mindsets in research may elucidate key interventions to prevent these attitudes.

2.7 Attribution

People with disabilities presenting behaviour perceived as challenging, in literature referred to as challenging behaviour, is at increased risk for abuse, inappropriate treatment, exclusion, deprivation and neglect (Emerson, McGill & Mansell, 1994; Romeo, Knapp, Tyrer, Crawford, & Oliver-Africano, 2009; Sturmey, 2009; all in Wishart, McKenzie, Newman & McKenzie, 2013). Staff working with this group of people are more likely to report negative emotional reactions, and fewer and less positive interactions with the people they support (Hastings, 1995; Raczka, 2005; Lawson & O'Brien, 1994; Rose, Jones, & Fletcher, 1998; all

in Wishart, et al., 2013). The important role of staff's behavioural responses in the development and maintenance of challenging behaviours has been highlighted through research (Hastings & Remington, 1994, in Wishart, et al., 2013). Attribution of challenging behaviour has been reported to affect helping behaviours towards individuals with intellectual disabilities and challenging behaviours (Wishart, et al., 2013). Attributional processes aim to infer the causes of social events, and concerns how people infer causal explanation for other people's behaviours and mental states (Fiske & Taylor, 2013). Weiner (1985, in Fiske & Taylor, 2013) established a model of attribution in the context of specific motivated behaviours, namely helping behaviours and achievement. Weiner (ibid) emphasised in the model how attribution regulates expectations, emotions and behaviour. Weiner's model for helping behaviour (1980, 1986, in Wishart, et al., 2013) has been applied to services for people with intellectual disabilities, and this model proposes that when the mediating role of positive emotion, is external, uncontrollable, and unstable causal attribution about a person's behaviour, one is more likely to display helping behaviour towards this person. The latter case is when staff attribute a person's behaviour as stable, internal and controllable, the effort put towards helping is reduced (Wishart, et al., 2013). The understanding these attitudes, as a result of attribution patterns, can help both quality of life and the enhancement of social inclusion (McManus, Feyes & Saucier, 2010). With regards to people with intellectual disabilities' history of mistreatment, staff's attitudes towards the individuals they are serving is arguably of great importance.

2.8 Completion

In this supplementary enclosure, it has been attempted to elaborate how the chosen subjects of research in the article connects with citizenship-theory. PBS has many characteristics and values consistent with hallmarks of active citizenship and social justice for individuals with intellectual disabilities, and applies a wide range of practices suggested by theorists in the field of citizenship, e.g. Martha Nussbaum. The text has also tried to elucidate the relevance of PBS being incorporated in to a master's programme in active citizenship, with regards to this being of the first thesis' presented in this area at VID specialized university. Although, the research conducted did not suggest that practicing in a PBS framework had any direct effect on staff's ways of thinking in this research sample, this supplementary text has tried to

emphasise the role of implicit theories and attribution on how we cultivate our practice as health professionals with the aim of empowering people and creating an environment characterized by growth for the individuals we encounter in our professional lives. As professionals, our own psychological worlds, may affect both effort and attitude put towards individuals receiving our services. Our own understanding of the social world surrounding us, may unconsciously and unarticulated create interactions leading to either a growth oriented, anti-oppressive and citizenship inducing environment, or the latter. This text has proposed ways to see implicit theories and attribution of behaviour that is experienced as challenging, as relevant to either promoting or antagonizing active citizenship as a consequence. To seek to understand one's own role in the professional – user interaction, other than the traditional narrative such as holder of expertise, power and influence, puts emphasis on the professional also being responsible as mediators of promotion of citizenship in services for individuals with intellectual disabilities, rather than projecting this to larger structures or to the capacity of the individual on its own.

References

Allen, D., James, W., Evans, J., Hawkins, S. & Jenkins, R. (2005). Positive Behavioural Support: Definition, Current Status and Future Directions. *Learning Disability Review*. **10**(2), 4-11.

Canning, E.A, Muenks, K., Green, D.J., & Murphy, M.C. (2019). STEM Faculty who Believe Ability is Fixed Have Larger Racial Achievement Gaps and Inspire Less Student Motivation in Their Classes. *Science Advances*. **5**(2), eaau4734. doi: 10.1126/sciadv.aau4734

Carr, E.G., Dunlap, G., Horner, R.H., Koegel, R.L., Turnbull, A.P., Sailor, W., Anderson, J.I., Albin, R.W., Koegel, L.K., & Fox, L. (2002). Positive Behavior Support. Evolution of an Applied Science. *Journal of Positive Behavior Interventions* **4**(1), 4-16, 20. doi:

https://doi.org/10.1177/109830070200400102

Carr, P.B., Dweck, C.S. & Pauker, K. (2012). "Prejudiced" Behavior without Prejudice? Beliefs About the Malleability of Prejudice Affect Interracial Interactions. *Journal of Personality and Social Psychology*. **103**(3), 452-471.

Dalrymple, J. & Burke, B. (2006). *Anti-Oppressive Practice. Social Care and the Law*. 2nd ed. Berkshire: Open University Press.

Dunlap, G., Sailor, W., Horner, R.H. & Sugai, G. (2011). Overview and History of Positive Behavior Support. In Sailor, W., Dunlap, G., Sugai, G. & Horner, R.H. (ed.). *Handbook of Positive Behavior Support*. New York, NY: Springer.

Dweck, C.S. (2000). *Self-theories: Their Role in Motivation, Personality, and Development.* New York: Psychology Press.

Dwyer, P. (2010). *Understanding Social Citizenship. Themes and Perspectives for Policy and Practice.* 2nd ed. Bristol: The Policy Press.

Enea-Drapeau, C., Carlier, M. & Huguet, P. (2017). Implicit Theories Concerning the Intelligence of Individuals with Down Syndrome. *Plos One.* **12**(11), e0188513. doi: 10.1371/journal.pone.0188513

Fiske, S.T. & Taylor, S.E. (2013). *Social Cognition. From Brain to Culture.* 2nd ed. London: Sage Publications ltd.

Gore, N.J., McGill, P., Toogood, S., Allen, D., Hughes, J.C., Baker, J., Hastings, R.P., Noone, S.J., & Denne, L.D. (2013). Definition and Scope for Positive Behaviour Support. *International Journal of Positive Behavioural Support.* **3**(2), 14-23.

Hall, E. (2010). Spaces of Social Inclusion and Belonging for People with Intellectual Disabilities. *Journal of Intellectual Disability Research.* **54**(1), 48-57. doi: https://doi.org/10.1111/j.1365-2788.2009.01237.x

Horner, R.H., Dunlap, G., Koegel, R.L., Carr, E.G., Sailor, W., Anderson, J., Albin, R.W. & O'Neill, R.E. (1990). Toward a Technology of "Nonaversive" Behavioral Support. *Journal of the Association for Persons with Severe Handicaps.* **15**(3), 125-132.

Larsen, moynahan & Gundersen (2006). Grunnlaget for positive atferds- og støttetiltak (PAST). In Gundersen, K. & moynahan, l. (ed.). *Nettverk og sosial kompetanse*. Oslo: Gyldendal akademisk.

Lapadat, J.C. (1998). Implicit Theories and Stigmatizing Labels. *Journal of College Reading and Learning.* **29**(1), 73-81.

LaVigna, G.W. & Willis, T.J. (2012). The Efficacy of Positive Behavioural Support with the Most Challenging Behaviour: The Evidence and its Implications. *Journal of Intellectual and Developmental Disability.* **37**(3), 185-195. doi: 10.3109/13669250.2012.696597

Levy, S.S., Plaks, J.E., & Dweck, C.S. (1999). Modes of Social Thought: Implicit Theories and Social Understanding. In Chaiken, S. & Trope, Y. (ed.). *Dual-Process Theories in Social Psychology*. New York: The Guildford Press.

Lid, I.M. (2017). Martha C. Nussbaums politiske teori om rettferdighet som bidrag til et teoretisk grunnlag for likeverd og medborgerskap. *Fontene forskning.* **10**(1), 16-28.

Lyndon, A.E., Crowe, A., Wuensch, K.L., McCammon, S.L. & Davis, K.B. (2016). College Students Stigmatization of People with Mental Illness: Familiarity, Implicit Person Theory, and Attribution. *Journal of Mental Health.* E.O, 1-5. doi: 10.1080./09638237.2016.1244722

McManus, J.L., Feyes, K.J & Saucier, D.A. (2010). Contact and Knowledge as Predictors of Attitudes Toward Individuals with Intellectual Disabilities. *Journal of Social and Personal Releationships.* **28**(5), 579-590.

Plaks, J.E., Stroessner, S.J., Dweck, C.S. & Sherman, J.W. (2001). Person Theories and Attention Allocation: Preferences for Stereotypic Versus Counterstereotypic Information. *Journal of Personality and Social Psychology.* **80**(6), 876-893.

Schalock, R., Verdugo, M., Gómez, L. & Reinders, H. (2015). Moving Us Toward a Theory of Individual Quality of Life. *American Journal on Intellectual and Developmental Disabilities.* **121**(1), 1-12. doi: 10.1352/1944-7558-121.1.1.

Schumann, K., Zaki, J. & Dweck, C.S. (2014). Addressing the Empathy Deficit: Beliefs About the Malleability of Empathy Predict Effortful Responses when Empathy is Challenging. *Journal of Personality and Social Psychology*. **107**(3), 475-493.

Singer, G.H.S. & Wang, M. (2011). The Intellectual Roots of Positive Behavior Support and Their Implications for Its Development. In Sailor, W., Dunlap, G., Sugai, G. & Horner, R.H. (ed.). *Handbook of Positive Behavior Support*. New York, NY: Springer.

Young, D.A. & Quibell, R. (2000). Why Rights are Never Enough: Rights, Intellectual Disability and Understanding. *Disability and Society*. **15**(5), 747-764.

Wishart, J., McKenzie, K., Newman, E., & McKenzie, A. (2013). Staff Responses to Behaviour that Challenges: The Role of Knowledge, Attribution, and Emotional Regulation Style. *Journal of Intellectual and Developmental Disability*. **38**(3), 205-214.

Appendix 1

CHABA, Norwegian translation derived from Hastings (1997, see article references):

Vignette: "Sophie er ei jente som har en alvorlig utviklingshemming. Noen ganger er Sophie aggressiv mot personene som tar vare på henne (for eksempel ansatte eller familie) eller mot personer hun bor med. Hun kan sparke og slå, lugge dem i håret, og dytte dem (noen ganger så hardt at de faller i bakken)

Tenk over hvor sannsynlige de påfølgende påstandene er som begrunnelse for hvorfor Sophie viser den atferden som hun gjør. Du har fått begrenset informasjon om henne, sammenlignet med det du ville hatt dersom du jobbet med Sophie. Derfor vurderer du hvilke påstander som vil være mest sannsynlige årsaker til noen som Sophie fremviser en slik atferd"

1. De får oppgaver som er for vanskelige for dem
2. De er syke fysisk
3. De er slitne
4. De opplever stressende situasjoner
5. Det er for mange folk i hjemmet eller i klasserommet
6. De kjeder seg
7. På grunn av medisinering
8. De er utilfredse med sin situasjon
9. De blir ikke møtt på et ønske om noe
10. De bor i et utrivelig miljø
11. De liker å gjøre det
12. De er i dårlig humør
13. De bekymrer seg for noe
14. På grunn av biologiske prosesser i kroppen deres
15. De vil ha noe
16. De er sinte
17. Det er ingenting annet for dem å gjøre

18. På grunn av støy der de bor eller oppholder seg

19. De føler seg sviktet eller skuffet av noen

20. De er fysisk funksjonshemmet

21. Det er liten plass i hjemmet eller klasserommet til å bevege seg

22. De blir overlatt til seg selv

23. De er sultne eller tørste

24. De er redde

25. Noen de misliker er i nærheten

26. Folk snakker lite til dem

27. De vil unngå kjedelige aktiviteter eller oppgaver

28. De er lite utendørs

29. De får sjelden delta i aktiviteter

30. De vil ha oppmerksomhet fra andre mennesker

Appendix 2

Nedenfor finner du noen påstander som angår ting du opplever i arbeidshverdagen. Kryss av for det alternativet som passer best for deg:

Når jeg mislykkes med noe faglig, ser jeg det som en mulighet til å lære mer

eller

Når jeg mislykkes med noe faglig, forteller det meg at jeg har gapt for høyt

Når jeg lykkes med noe vanskelig, bekrefter det at jeg er flink

eller

Når jeg lykkes med noe vanskelig, viser det at jeg har gjort en bra innsats

Tilbakemelding og kritikk fra andre motiverer meg

eller

Tilbakemelding og kritikk fra andre synes jeg egentlig ikke noe om

Hvis det er noe jeg ikke behersker så godt, gir jeg fort opp

eller

Hvis det er noe jeg ikke behersker så godt, gir jeg meg ikke før jeg har klart det

Appendix 3

Cover letter to participants:

<p align="center">Vil du delta i forskningsprosjektet</p>

<p align="center">"Staff Attribution of Challenging Behavior and Their Implicit Theories Within and Outside a Positive Behavior Support Framework"</p>

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å undersøke årsaksforklaringer og tenkemåte hos ansatte som arbeider med personer med utviklingshemming og utfordrende atferd. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Link til å delta i prosjektet finner du her

https://uitpsych.qualtrics.com/jfe/form/SV_3w3qIOHSQaFMrPv

Formål

Formålet med denne undersøkelsen er å utforske om faglig rammeverk påvirker ansatte som arbeider med personer med utviklingshemming og utfordrende atferd sine årsaksforklaringer til utfordrende atferd og tankesett. Data som samles inn gjennom undersøkelsen vil brukes til en forskningsartikkel som er et mastergradsprosjekt ved VID vitenskapelige høgskole, ved studiet medborgerskap og samhandling. Denne artikkelen eller andre artikler basert på datamaterialet kan kunne komme til å bli publisert i et vitenskapelig tidsskrift dersom manuskript blir akseptert.

Hvem er ansvarlig for forskningsprosjektet?

Hilde Karin Sønneland, masterstudent ved VID vitenskapelige høgskole

hilde.sonneland@gmail.com

Frode Svartdal, Professor II ved VID vitenskapelige høgskole (veileder)

frode.svartdal@uit.no

Ulf Berge, Høgskolelektor ved VID vitenskapelige høgskole (bi-veileder)

ulf.berge@vid.no

Hvorfor får du spørsmål om å delta?

Du forespørres om å delta fordi du arbeider i tjenester for personer med utviklingshemming og har en minimum 3-årig høgskoleutdannelse. Du er en av flere ansatte i regionen som forespørres om å delta. Din leder eller en annen kontaktperson har blitt kontaktet for forespørsel om deltakelse, og spørreskjemaet distribueres til deg som matcher disse kriteriene via ham/henne. Vi kjenner ikke din identitet.

Hva innebærer det for deg å delta?

Hvis du velger å delta i prosjektet, innebærer det at samtykker til å delta i prosjektet og du fyller ut et spørreskjema. Det vil ta deg ca. 10 minutter. Spørreskjemaet inneholder en case med spørsmål om sannsynlighet for hvorfor utfordrende atferd oppstår, noen få spørsmål om hvordan du tenker om noen påstander og vi spør etter noen opplysninger om deg. Vær oppmerksom på å fullføre skjemaet.

44

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Undersøkelsen samler inn anonyme opplysninger og det vil ikke være mulig for oss å identifisere deg eller din arbeidsplass. Dette er fordi datamaterialet er anonymt og etter du har besvart er det ikke mulig å knytte opplysningene du har gitt tilbake til deg som individ. Det er heller ikke mulig å knytte svar opp til arbeidssted eller arbeidsgiver eller spore deg via IP-adresse.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Mastergradsstudent og veiledere vil være dem som har tilgang til datamaterialet. Data lagres på en ekstern server fra tjenesteleverandør (Qualtrics) for den elektroniske undersøkelsen. Du vil ikke kunne gjenkjennes i en publikasjon på bakgrunn av sammensetning av opplysninger. For eksempel vil indirekte identifiserbare opplysninger som kjønn, alder og utdanning grovkategoriseres.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Prosjektet skal etter planen avsluttes juni 2019.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra VID vitenskapelige høgskole har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Hvor kan jeg finne ut mer?

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

VID vitenskapelige høgskole ved

Hilde Karin Sønneland, masterstudent ved VID vitenskapelige høgskole

hilde.sonneland@gmail.com

Frode Svartdal, Professor II ved VID vitenskapelige høgskole (veileder)

frode.svartdal@uit.no

Ulf Berge, Høgskolelektor ved VID vitenskapelige høgskole (bi-veileder)

ulf.berge@vid.no

NSD – Norsk senter for forskningsdata AS, på epost (personvernombudet@nsd.no) eller telefon: 55 58 21 17.

Med vennlig hilsen

Hilde Karin Sønneland   Frode Svartdal   Ulf Berge

VID vitenskapelige høgskole

Appendix 4

Author guidelines for Journal of Intellectual Disability Research:

Author Guidelines

Thank you for your interest in *Journal of Intellectual Disability Research.* Please read the complete Author Guidelines carefully prior to submission, including the section on copyright.

Note that submission implies that the content has not been published or submitted for publication elsewhere except as a brief abstract in the proceedings of a scientific meeting or symposium.

Content of Author Guidelines:

1. Editorial and Content Considerations
2. Ethical Guidelines
3. Manuscript Types Accepted
4. Preparation of Your Manuscript
5. Submitting Your Manuscript
6. Copyright, Licencing and Online Open
7. Post Acceptance
8. Post Publication

Quick links: [JIDR Submission Site](#), **[Wiley's Resources for Journal Authors](#)**

1. EDITORIAL AND CONTENT CONSIDERATIONS

Journal of Intellectual Disability Research is devoted exclusively to the scientific study of intellectual disability and publishes papers reporting original observations in this field. The subject matter is broad and includes, but is not restricted to, findings from biological, educational, genetic, medical, psychiatric, psychological and sociological studies, and ethical, philosophical, and legal contributions that increase knowledge on the treatment and prevention of intellectual disability and of associated impairments and disabilities, and/or inform public policy and practice.

The journal publishes Full Reports, Brief Reports and Systematic Reviews. Mental Health Special Editions are published quarterly. Narrative reviews and hypothesis papers are

encouraged but authors should discuss the focus of their review with the Editor in Chief prior to submission to ensure it is appropriate for the journal. Case studies are **not** published by JIDR.

Journal of Intellectual Disability Research will feature four Annotation articles each year covering a variety of topics of relevance to the main aims of the journal or topics. Senior researchers, academics and clinicians of recognised standing in their field will be invited to write an Annotation for the journal covering an area that will be negotiated with the Editor in Chief, Prof. Richard Hastings, on behalf of the Editorial Team.

Peer Review Process

The acceptance criteria for all papers are the quality and originality of the research and its significance to our readership. Except where otherwise stated, manuscripts are double-blind peer reviewed by two anonymous reviewers and the editor.

Journal of Intellectual Disability Research attempts to keep the review process as short as possible to enable rapid publication of new scientific data. In order to facilitate this process, submitting authors are asked to suggest the names and current e-mail addresses of two potential reviewers whom you consider capable of reviewing your manuscript. In addition to your choice the journal editor will choose one or two reviewers as well. Suggestions will be requested via the submission system.

Authors who wish to appeal the decision on their submitted paper may do so by e-mailing the Editorial Office with a detailed explanation for why they find reasons to appeal the decision.

Plagiarism detection

• The journal employs a plagiarism detection system. By submitting your manuscript to this journal you accept that your manuscript may be screened for plagiarism against previously published works.

• Individual authors and researchers can now check their work for plagiarism before submission - please click **here**for details.

2. ETHICAL GUIDELINES

Journal of Intellectual Disability Research adheres to the ethical guidelines for publication and research summarised below.

Authorship and Acknowledgements

Authorship: Authors submitting a paper do so on the understanding that the manuscript has been read and approved by all authors and that all authors agree to the submission of the manuscript to the journal. ALL named authors must have made an active contribution to the conception and design and/or analysis and interpretation of the data and/or the drafting of the paper and ALL must have critically reviewed its content and have approved the final version submitted for publication. Participation solely in the acquisition of funding or the collection of data does not justify authorship and, except in the case of complex large-scale or multi-centre research.

Journal of Intellectual Disability Research adheres to the definition of authorship set up by The International Committee of Medical Journal Editors (ICMJE). According to the ICMJE authorship criteria should be based on 1) substantial contributions to conception and design of, or acquisition of data or analysis and interpretation of data, 2) drafting the article or revising it critically for important intellectual content and 3) final approval of the version to be published. Authors should meet conditions 1, 2 and 3.

It is a requirement that all authors have been accredited as appropriate upon submission of the manuscript. Contributors who do not qualify as authors should be mentioned under Acknowledgements.

Acknowledgements: Under Acknowledgements please specify contributors to the article other than the authors accredited. Suppliers of materials should be named and their location (town, state/county, country) included.

The specifications of the source of funding for the study and any potential conflict of interests should be in their own section.

Ethical Approvals

Experimental Subjects

Experimentation involving human subjects will only be published if such research has been conducted in full accordance with ethical principles, including the World Medical Association Declaration of Helsinki (version, 2002 **www.wma.net/e/policy/b3.htm**) and the additional requirements, if any, of the country where the research has been carried out. Manuscripts must be accompanied by a statement that the research was undertaken with the understanding and written consent of each participant and according to the above mentioned principles. A statement regarding the fact that the study has been independently reviewed and approved by an ethical board should also be included. Editors reserve the right to reject papers if there are doubts as to whether appropriate procedures have been used.

All studies using human participants or animal subjects should include an explicit statement in the Material and Methods section identifying the review and ethics committee approval for each study, if applicable. Editors reserve the right to reject papers if there is doubt as to whether appropriate procedures have been used.

Human Studies and Subjects

For manuscripts reporting medical studies involving human participants, we require a statement identifying the ethics committee that approved the study, and that the study conforms to recognized standards, for example: Declaration of Helsinki; US Federal Policy for the Protection of Human Subjects; or European Medicines Agency Guidelines for Good Clinical Practice.

Images and information from individual participants will only be published where the authors have obtained the individual's free prior informed consent. Authors do not need to provide a copy of the consent form to the publisher, however in signing the author license to publish authors are required to confirm that consent has been obtained. Wiley has a standard patient consent form available for use.

Ethics of investigation: Papers not in agreement with the guidelines of the Helsinki Declaration as revised in 1975 will not be accepted for publication.

Clinical Trials

Clinical trials should be reported using the CONSORT guidelines available at **www.consort-statement.org**. A CONSORT checklist should also be included in the submission material (**http://www.consort-statement.org/mod_product/uploads/CONSORT 2001 checklist.doc**).

Manuscripts reporting results from a clinical trial must provide the registration number and name of the clinical trial. Clinical trials can be registered in any of the following free, public clinical trials registries: **www.clinicaltrials.gov**, clinicaltrials-dev.ifpma.org/, isrctn.org/. The clinical trial registration number and name of the trial register will be published with the paper.

Conflict of Interest

Authors are required to disclose any possible conflict of interest. These include financial (for example patent, ownership, stock ownership, consultancies, speaker's fee). Author's conflict of interest (or information specifying the absence of conflicts of interest) will be published under a separate heading entitled 'Conflict of Interests'.

Journal of Intellectual Disability Research requires that sources of institutional, private and corporate financial support for the work within the manuscript must be fully acknowledged, and any potential conflicts of interest noted. Please include this information under the separate headings of 'Source of Funding' and 'Conflict of Interest' at the end of your manuscript.

If the author does not include a conflict of interest statement in the manuscript then the following statement will be included by default: "No conflicts of interest have been declared".

Source of Funding

Authors are required to specify the source of funding for their research when submitting a paper. Suppliers of materials should be named and their location (town, state/county, country) included. The information will be disclosed in the published article.

Publication Ethics

The journal is a member of, and subscribes to the principles of the **Committee on Publication Ethics (COPE)**. Wiley's Ethics guidelines can also be found at **http://exchanges.wiley.com/ethicsguidelines**

3. MANUSCRIPT TYPES ACCEPTED

Original Research Articles

The main text should proceed through sections of Abstract, Background, Methods, Results, and Discussion. Reports of up to 4,500 words are suitable for major studies and presentation of related research projects or longitudinal enquiry of major theoretical and/or empirical conditions. Please note that articles exceeding 4,500 words will be unsubmitted immediately from the review process and the authors will be asked to reduce the length of the article.

Authors submitting articles should be guided by the following checklists prior to submission:

For observational studies: **http://www.strobe-statement.org/?id=available-checklists**

For diagnostic studies: (**http://www.stard-statement.org/checklist_maintext.htm**)

Qualitative Studies

Qualitative Studies are only considered if they have strong theoretical underpinnings and use an established method of data synthesis.

Systematic Reviews

The maximum word length for systematic reviews is 4,500 words. Authors submitting a systematic review are encouraged to assess the quality of their article against the PRISMA checklist prior to submission (**http://www.prisma-statement.org/2.1.2 - PRISMA 2009 Checklist.pdf**) or MOOSE guideline (insert link to MOOSE PdF).

Brief Reports

Brief Reports of up to 1,500 words are encouraged especially for replication studies, methodological research and technical contributions.

Annotation Articles

Annotation Articles should be no more than 5,500 words long including tables and figures and should not have been previously published or currently under review with another

journal. The normal instructions to authors apply. The date for submission of the article should be negotiated with the Editor in Chief. An honorarium of £400 in total shall be paid to the authors(s) when the article is accepted for publication.

Three main types of Annotations will be commissioned: 1. Authoritative reviews of empirical and theoretical literature. 2. Articles proposing a novel or modified theory or model. 3. Articles detailing a critical evaluation and summary of literature pertaining to the treatment of a specific disorder.

Hypothesis Papers

A Hypothesis Paper can be up to 2,500 words and no more than twenty key references. It aims to outline a significant advance in thinking that is testable and which challenges previously held concepts and theoretical perspectives. Hypothesis papers should be discussed with the Editor in Chief prior to submission.

*Please note JIDR does not publish **Case studies.***

4. PREPARATION OF THE MANUSCRIPT

Author Services

Prior to submission, we encourage you to browse the 'Author Resources' section of the Wiley 'Author Services' website **here**. This site includes useful information covering such topics as copyright matters, ethics and electronic artwork guidelines.

Writing for Search Engine Optimization

Optimize the search engine results for your paper, so people can find, read and ultimately cite your work. Simply read our best practice **SEO tips** – including information on making your title and abstract SEO-friendly, and choosing appropriate keywords.

Pre-submission English-language editing

Authors for whom English is a second language may choose to have their manuscript professionally edited before submission to improve the English. Visit **our site** to learn about

the options. All services are paid for and arranged by the author. Please note using the Wiley English Language Editing Service does not guarantee that your paper will be accepted by this journal.

Spelling

• Spelling should conform to The Concise Oxford Dictionary of Current English.

• A high proportion of papers are submitted with the term 'behavior' as opposed to 'behaviour'; please use 'behaviour'.

• Where applicable the journal standard is to use words ending in –ise as opposed to –ize. For example, use 'analyse' 'standardise' as opposed to 'analyze' and 'standardize'

Units of measurements, symbols and abbreviations should conform with those in Units, Symbols and Abbreviations (1977) published and supplied by the Royal Society of Medicine. This specifies the use of SI units.

Terminology

It is important that the term 'intellectual disabilities' is used when preparing manuscripts. Please note that 'intellectual disability', as used in the journal, includes those conditions labelled mental deficiency, mental handicap, learning disability and mental retardation in some counties. The term 'person', 'people' or 'participant(s)' should be used as opposed to 'patient(s)'.

Optimising your paper on social media

If your paper is accepted for publication we would like to present three, headline style summary statements on our facebook and twitter feed. When you submit your article you will be asked to enter up to three short headlines (key statements) capture the importance of your paper.

MANUSCRIPT STRUCTURE

The manuscript should be submitted in separate files: title page; main text file; figures.

54

Title page

A 'Title Page' must be submitted as part of the submission process as a 'Supplementary File Not for Review. The title page should contain:

(i) a short informative title that contains the major key words. The title should not contain abbreviations (see Wiley's best practice **SEO tips**;

(ii) the full names of the authors;

(iii) the author's institutional affiliations at which the work was carried out;

(iv) the full postal and email address, plus telephone number, of the author to whom correspondence about the manuscript should be sent;

(v) acknowledgements;

(vi) conflict of interest statement.

The present address of any author, if different from that where the work was carried out, should be supplied in a footnote.

Acknowledgements

Contributions from anyone who does not meet the criteria for authorship should be listed, with permission from the contributor, in an Acknowledgments section. See section on Authorship for more detail. Material support should also be mentioned Thanks to anonymous reviewers are not appropriate.

Main text

As papers are double-blind peer reviewed the main text file should not include any information that might identify the authors.

The main text of the manuscript should be presented in the following order: (i) structured abstract and key words (ii) text, (iii) references, (vi) endnotes, (vii) tables (each table complete with title and footnotes), and (ix) figure legends. Figures should be supplied as separate files. Footnotes to the text are not allowed and any such material should be incorporated as endnotes.

Abstract

For full and brief reports, and reviews, a structured summary should be included at the beginning of each article, incorporating the following headings: Background, Method, Results, and Conclusions. These should outline the questions investigated, the design, essential findings, and the main conclusions of the study.

Keywords

The author should also provide up to six keywords. Please think carefully about the keywords you choose as this will impact on the discoverability of your paper during literature searches (**https://authorservices.wiley.com/bauthor/seo.asp**)

References

• The journal follows the Harvard reference style.

• References in text with more than two authors should be abbreviated to (Brown et al. 1977).

• Where more than six authors are listed for a reference please use the first six then 'et al.'

• Authors are encouraged to include the DOI (digital object identifier) for any references to material published online. See **www.doi.org/** for more information. If an author cites anything which does not have a DOI they run the risk of the cited material not being traceable.

• Authors are responsible for the accuracy of their references.

The reference list should be in alphabetical order thus:

Giblett E.R. (1969) Genetic Markers in Human Blood. Blackwell Scientific Publications, Oxford.

Moss T.J. & Austin G.E. (1980) Preatherosclerotic lesions in Down's syndrome. *Journal of Mental Deficiency Research* **24**, 137- 41.

Seltzer M. M. & Krauss M.W. (1994) Aging parents with co-resident adult children: the impact of lifelong caregiving. In: *Life Course Perspectives on Adulthood and Old Age* (eds M. M. Seltzer, M.W. Krauss & M. P. Janicki), pp. 3–18. American Association on Mental Retardation, Washington, DC.

Endnotes

Endnotes should be placed as a list at the end of the paper only, not at the foot of each page. They should be numbered in the list and referred to in the text with consecutive, superscript

Arabic numerals. Keep endnotes brief; they should contain only short comments tangential to the main argument of the paper.

Tables

Tables should include only essential data. Each table must be typewritten on a separate sheet and should be numbered consecutively with Arabic numerals, e.g. Table 1, Table 2, etc., and give a short caption.

Figure Legends

Figure Legends should be concise but comprehensive – the figure and its legend must be understandable without reference to the text. Include definitions of any symbols used and define/explain all abbreviations and units of measurement.

Figures

All illustrations (line drawings and photographs) are classified as figures. Figures should be numbered using Arabic numerals, and cited in consecutive order in the text. Each figure should be supplied as a separate file, with the figure number incorporated in the file name.

Preparing Figures. Although we encourage authors to send us the highest-quality figures possible, for peer-review purposes we are happy to accept a wide variety of formats, sizes, and resolutions. **Click here** for the basic figure requirements for figures submitted with manuscripts for initial peer review, as well as the more detailed post-acceptance figure requirements.

Color figures. Color figures may be published online free of charge; however, the journal charges for publishing figures in colour in print. If the author supplies colour figures at Early View publication, they will be invited to complete a colour charge agreement in RightsLink for Author Services. The author will have the option of paying immediately with a credit or debit card, or they can request an invoice. If the author chooses not to purchase color printing, the figures will be converted to black and white for the print issue of the journal.

Supporting Information

Supporting information is information that is not essential to the article but that provides greater depth and background. It is hosted online, and appears without editing or typesetting. It may include tables, figures, videos, datasets, etc. **Click here** for Wiley's FAQs on supporting information.

Please note that the provision of supporting information is not encouraged as a general rule. It will be assessed critically by reviewers and editors and will only be accepted if it is essential.

5. SUBMISSION OF MANUSCRIPTS

Manuscripts should be submitted electronically via the online submission site **http://mc.manuscriptcentral.com/jidr**.

Further assistance can be obtained from Erica Alexis Bacay, email: **JIDR.editorialoffice@wiley.com**

• Launch your web browser and go to the journal's online submission site: **http://mc.manuscriptcentral.com/jidr**

• Log-in or click the 'Create Account' option if you are a first-time user.

• If you are creating a new account.
- After clicking on 'Create Account', enter your name and e-mail information and click 'Next'. Your e-mail information is very important.
- Enter your institution and address information as appropriate, and then click 'Next.'
- Enter a user ID and password of your choice (we recommend using your e-mail address as your user ID), and then select your area of expertise. Click 'Finish'.

• Log-in and select 'Author Centre'.

Submitting Your Manuscript

After you have logged in, click the 'Submit a Manuscript' link in the menu bar.

Enter data and answer questions as appropriate. You may copy and paste directly from your manuscript and you may upload your pre-prepared covering letter.

Click the 'Next' button on each screen to save your work and advance to the next screen.

You are required to upload your files.

- Click on the 'Browse' button and locate the file on your computer.

- Select the designation of each file in the drop-down menu next to the Browse button.

- When you have selected all files you wish to upload, click the 'Upload Files' button.

Review your submission (in HTML and PDF format) before sending to the Journal. Click the 'Submit' button when you are finished reviewing.

Manuscript Files Accepted

Manuscripts should be uploaded in an editable file format, such as as Word (.doc) or Rich Text Format (.rft). Figures must be provided in seperate files and in co-ordance with the **Electronic Artwork Guidelines**. The files will be automatically converted to HTML and PDF on upload and will be used for the review process.

Blinded Review

To allow double-blinded review, please submit (upload) your main manuscript and title page as separate files.

Please upload:

- Your manuscript without title page under the file designation 'main document'

- Figure files under the file designation 'figures'

- The title page should be uploaded under the file designation 'title page'.

All documents uploaded under the file designation 'title page' will not be viewable in the HTML and PDF format you are asked to review at the end of the submission process. The files viewable in the HTML and PDF format are the files available to the reviewer in the review process.

Suggest a Reviewer

Journal of Intellectual Disability Research attempts to keep the review process as short as possible to enable rapid publication of new scientific data. In order to facilitate this process, please suggest the names and current e-mail addresses of 2 potential reviewers whom you consider capable of reviewing your manuscript. In addition to your choice the journal editor

will choose one or two reviewers as well.

Suspension of Submission Mid-way in the Submission Process

You may suspend a submission at any phase before clicking the 'Submit' button and save it to submit later. The manuscript can then be located under 'Unsubmitted Manuscripts' and you can click on 'Continue Submission' to continue your submission when you choose to.

E-mail Confirmation of Submission

After submission you will receive an e-mail to confirm receipt of your manuscript. If you do not receive the confirmation e-mail after 24 hours, please check your e-mail address carefully in the system. If the e-mail address is correct please contact your IT department. The error may be caused by spam filtering software on your e-mail server. Also, the e-mails should be received if the IT department adds our e-mail server (uranus.scholarone.com) to their whitelist.

Manuscript Status

You can access ScholarOne Manuscripts any time to check your 'Author Center' for the status of your manuscript. The journal will inform you by e-mail once a decision has been made.

Submission of Revised Manuscripts

Revised manuscripts must be uploaded within three months of authors being notified of conditional acceptance pending satisfactory revision. Locate your manuscript under 'Manuscripts with Decisions' and click on 'Submit a Revision' to submit your revised manuscript. Please remember to delete any old files uploaded when you upload your revised manuscript. Please also remember to upload your manuscript document separate from your title page.

6. COPYRIGHT, LICENCING AND ONLINE OPEN

Accepted papers will be passed to Wiley's production team for publication. The author identified as the formal corresponding author for the paper will receive an email prompting

them to login into Wiley's Author Services, where via the Wiley Author Licensing Service (WALS) they will be asked to complete an electronic license agreement on behalf of all authors on the paper.

Authors may choose to publish under the terms of the journal's standard copyright transfer agreement (CTA), or under open access terms made available via Wiley OnlineOpen.

Standard Copyright Transfer Agreement: FAQs about the terms and conditions of the standard CTA in place for the journal, including standard terms regarding archiving of the accepted version of the paper, are available at: **Copyright Terms and Conditions FAQs.** Note that in signing the journal's licence agreement authors agree that consent to reproduce figures from another source has been obtained.

OnlineOpen – Wiley's Open Access Option: OnlineOpen is available to authors of articles who wish to make their article freely available to all on Wiley Online Library under a Creative Commons license. With OnlineOpen, the author, the author's funding agency, or the author's institution pays a fee to ensure that the article is made open access. Authors of OnlineOpen articles are permitted to post the final, published PDF of their article on their personal website, and in an institutional repository or other free public server immediately after publication. All OnlineOpen articles are treated in the same way as any other article. They go through the journal's standard peer-review process and will be accepted or rejected based on their own merit.

OnlineOpen licenses. If the OnlineOpen option is selected the corresponding author will have a choice of the following Creative Commons License Open Access Agreements (OAA):

Creative Commons Attribution License (CC BY) OAA

Creative Commons Attribution Non-Commercial License (CC BY NC) OAA

Creative Commons Attribution Non-Commercial -NoDerivs License (CC BY NC ND) OAA

To preview the terms and conditions of these open access agreements please visit the **Copyright Terms and Conditions FAQs.**

If you select the OnlineOpen option and your research is funded by The Wellcome Trust and members of the Research Councils UK (RCUK) you will be given the opportunity to publish

your article under a CC-BY license supporting you in complying with Wellcome Trust and Research Councils UK requirements. For more information on this policy and the journal's compliant self-archiving policy please visit: **http://www.wiley.com/go/funderstatement**.

7. POST ACCEPTANCE

Before your accepted article is published online, it goes through Wiley's production process. Wiley does everything possible to publish your article quickly and to the highest possible standard, as well as taking you through what to expect at each stage of the process.

Accepted article received in production

Your article is received at the publisher for production to begin. You (corresponding authors) receive an email asking you to login or register with **Author Services.** At this point, navigate to the "Amend My Details" page and choose whether you wish to:

• Publish your article open access with Wiley's OnlineOpen option
• Transfer the copyright of your article (if you do not publish open access)
• Track the publication status of your article (request to receive an e-mail alert at any, or all of the tracked stages of production)
• Nominate up to ten colleagues to receive a publication alert and free online access to your article (once published).
• Update your article with your ORCID iD.

Your publication checklist:

• Provide accurate proofreading and clearly mark any corrections as soon as possible.
• When prompted, ensure you acknowledge any funding support.
• Choose and arrange payment for open access as required.
• Sign a copyright license.

Copyediting and Typesetting

Wiley copyedit your article for style, grammar and nomenclature. Wiley also typeset your article, to make it look great.

Proofing and corrections

After copyediting and typesetting the article goes back to you. This is your chance to give your article a last look before it is published.

• A link to article proofs is provided via email.

• Accurately proofread your article and clearly mark any corrections online as soon as possible.

Please note that you are responsible for all statements made in your work, including changes made during the editorial process and thus you must check your proofs carefully.

Early View

The journal offers rapid speed to publication via Wiley's Early View service. Early View (Online Version of Record) articles are published on Wiley Online Library before inclusion in an issue. Note there may be a delay after corrections are received before your article appears online, as Editors also need to review proofs. Once your article is published on Early View no further changes to your article are possible. Your Early View article is fully citable and carries an online publication date and DOI for citations.

8. POST PUBLICATION

Access and sharing

When your article is published online:

• You receive an email alert (if requested).

• You can share your published article through social media.

• As the author, you retain free access (after accepting the Terms & Conditions of use, you can view your article).

• The corresponding author and co-authors can nominate up to ten colleagues to receive a publication alert and free online access to your article.

You can now order print copies of your article (instructions are sent at proofing stage).

Now is the time to start promoting your article. Find out how to do that <u>here.</u>

Measuring the Impact of your Work

Wiley also helps you measure the impact of your research through our specialist partnerships with **Kudos** and **Altmetric.**

Video Abstracts

A video abstract can be a quick way to make the message of your research accessible to a much larger audience. Wiley and its partner Research Square offer a service of professionally produced video abstracts, available to authors of articles accepted in this journal. You can learn more about it at **www.wileyauthors.com/videoabstracts**. If you have any questions, please direct them to **videoabstracts@wiley.com**.