

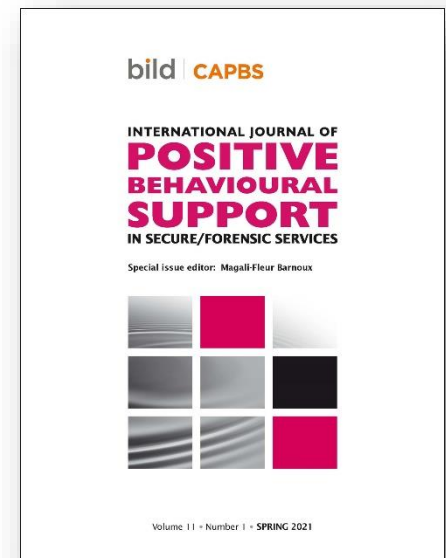
What does research tell us about the use of PBS in secure / forensic settings?

International Journal for Positive Behavioural Support
(IJPBS) Special Issue Webinar

29 September 2021, 2-3pm (BST)

Spring 2021 issue of PBS in secure / forensic services

- *Positive behavioural support for people with intellectual disabilities in forensic settings: A case of the emperor's new clothes?* John L Taylor
- *Managing challenging behaviour using applied behavioural analysis and positive behavioural support in forensic settings: A systematic review*, J Collins, M Barnoux and P Baker
- *Secure unit: Positive behavioural support and restraint reduction in a unit for offenders with an intellectual disability and/or autism: practice paper*, Laura Higgins
- *Positive behavioural support in a forensic inpatient setting – a case study*, Wendy Bullard and Lindsay Ellis
- Find out about more about the journal at: <https://bit.ly/Bildjournals>



Special issue guest editor:
Magali-Fleur Barnoux

bild | CAPBS 11 - 13 October 2021

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The evolving world of Positive Behaviour Support - moving forward together



- Bookings are available for in-person and virtual attendance with early bird discounts extended until Friday, 30 September
- Hosted at The DoubleTree by Hilton Glasgow Central, renowned PBS speakers and experts with lived experience from the UK and across the globe will explore the theme: *The evolving world of PBS: moving forward together*
- The programme can be viewed here: <https://bit.ly/PBSconfprogramme>
- You can book your place here: <https://bit.ly/PBSconfregister>

Celebrating 10 years of the journal!

- The Bild 2021 International PBS Conference Pre-conference research seminar, hosted by the *International Journal of Positive Behavioural Support*, 11 October, Glasgow
- Senior Editor Dr Peter Baker, and fellow researchers, will reflect on the last 10 years in PBS, sharing their thoughts about what might come next
- The programme can be viewed here: <https://bit.ly/PBSconfprogramme>
- The symposium is part of the main International PBS Conference taking place on 11-13 October
- You can book your place here: <https://bit.ly/PBSconfregister>

Managing challenging behaviour using applied behavioural analysis and positive behavioural support in forensic settings: A systematic review
J Collins, M Barnoux and P Baker (2021)

International Journal of Positive Behavioural Support, 11,1, 15–41



Purpose of the review

The purpose of this review was to systematically examine and synthesise existing research to investigate the effectiveness of ABA and PBS in forensic settings, and to identify any potential barriers and facilitators associated with implementing PBS

Method

Search - Databases including PsychINFO, PsychARTICLES, Medline, CINAHL Plus with Full Text, Criminal Justice Abstracts, were searched. ABA/PBS journals in the field were targeted with ancestry searches conducted to identify relevant articles.

Evaluation - The methodological quality of studies was assessed using the Mixed Methods Appraisal Tool.

Results

- Searches resulted in 29 articles that met the specific inclusion criteria.
- 18 articles focused on the implementation and evaluation of interventions for service-users that were grounded in ABA. Token economy programmes were implemented and evaluated in 10 studies and tolerance training, group contingencies, and behavioural skills training were implemented and evaluated in three studies. 4 studies evaluated staff training packages focused on antecedents and behaviour modification
- 11 articles focused on the evaluation of PBS training or intervention

Results

The majority of research took a quantitative non-randomised approach. Common methodological limitations of included studies were:

- Unrepresentative
- Used inappropriate outcomes measures, whereby variables indicative of the effectiveness of PBS, quality of life and the frequency of challenging behaviour were not robustly measured
- Had missing data
- Had a risk of confounding variables not accounted for in the design or analysis of the study.

Only 3 RCT studies (although assessors were not blind to the intervention)

Results

- The range of settings from which participants were recruited was limited, with five studies conducted within the same medium secure service
- The majority of studies were conducted in the US
- Limited demographic and background information concerning participants was reported.
- No long term follow up of participants was conducted to ensure changes in behaviour were maintained over time.

Conclusions

- Limited research has been conducted
- The studies are dated and preclude more recent advancements in the field concerning a more person centred approach to care and treatment.
- The methodological quality of studies that have been conducted is generally low and lack validity, reliability and generalisability.
- Nevertheless, the evidence does suggest behavioural modification techniques, behavioural analysis and PBS have been implemented within forensic settings with some degree of success. Although this should be interpreted with some caution

**PBS for People with ID in Forensic Settings:
*The Emperor's New Clothes?***

**PBS in Forensic Settings
IJPBS Special Edition Webinar
29th September 2021**

**John L Taylor
*Northumbria University Newcastle***

Definitional & Conceptual Ambiguity 1

PBS is

- **‘an applied science that uses educational and systems change methods to enhance quality of life and minimise problem behaviour.’**

(E. Carr et al., 2002)

- **‘a set of evidence based strategies used to increase quality of life and decrease problem behaviour by teaching people new skills and making changes to their environments.’**

(Association of PBS)

- **‘a multicomponent framework for developing an understanding of behaviour that challenges rather than a single therapeutic approach, treatment or philosophy.’**

(Gore et al., 2013)

Definitional & Conceptual Ambiguity 2

PBS

- ‘combines the technology of applied behavior analysis with the values base of contemporary services for people with ID and delivers this within a framework of person centred approaches.’

(IJPBS)

- ‘is the application of the science of ABA in support of people with challenging behaviour.’

(LaVigna & Willis, 2012)

- ‘there is no difference in theory or science between PBS and behaviour modification. These are the same approach with different names.’

(Horner, 2000)

PBS and ABA – Same or Different?

- **PBS places central importance on values and principles – e.g. QoL, dignity, respect, choice, person-centredness**
- **ABA prioritises evidence of efficacy for its procedures – with positive values and principles providing a context for their implementation**
- **PBS focuses on antecedent control of stimuli and behaviour supports through environmental adjustments and modifications**
- **ABA addresses contingency management and motivations along with antecedent factors – plus skills training**
- **Significant differences in training requirements**

(Johnston et al., 2006)

The Evidence for PBS 1

- **Early reviews of the effectiveness of PBS (e.g. E Carr et al., 2009; Marquis et al., 2000) mostly relied on studies concerning ABA rather than PBS interventions**
(J Carr & Sidener, 2002; Mulick & Butter, 2005)
- **LaVigna & Willis (2012) review**
 - **12 studies; 1985-2010; 423 participants**
 - **Severe and high frequency behaviour problems**
 - **10/12 studies included direct interventions; 24 participants**
 - **High frequency behaviour in 2 case studies**
 - **QoL and/or positive life changes not considered**

The Evidence for PBS 2

- **Hassiotis et al. (2018) *BJ of Psychiatry***
 - **cRCT of PBS skills training**
 - **Qualified staff in 23 community ID teams**
 - **246 service users with behaviour problems**
 - **TAU or TAU+PBS conditions**
 - **No improvements on CB at 6 and 12 months follow-up**

- **McKenzie et al. (2020) *JARID***
 - **CT of PBS skills training**
 - **299 staff in social care community services**
 - **Allocated non-randomly to accredited PBS training or no-training groups**
 - **207 service users with behaviour problems**
 - **No improvements on CB post-intervention and 3 months f-up**

The Evidence for PBS 3

- **Collins, Barnoux & Baker (2021) *IJPBS***
 - Systematic review of ABA and PBS in forensic settings
 - 29 studies met the review inclusion criteria
 - Published between 2005 & 2019
 - 11 of the 29 studies concerned PBS interventions
 - All conducted in inpatient/institutional settings
 - 6 PBS skills training studies; 5 direct PBS interventions
 - 3 studies (N = 42) included CB as a dependent variable
 - All 3 studies with CB as DV reported positive outcomes
 - 2 of these 3 studies were single case studies
 - These 2 single case studies were the only PBS studies involving participants with ID
- **Barnoux & Langdon (2021) HEE Forensic LD Resource Book**
 - No studies of the effectiveness for PBS with people with ID and forensic needs in community settings

NICE Guideline 11: Challenging Behaviour and LD (May 2015) – PBS

Review question:

- *In people with a learning disability and behaviour that challenges, what are the benefits and potential harms associated with psychosocial interventions aimed at reducing and managing behaviour that challenges?*
- *“The reviews did not find any evidence on the effectiveness of PBS.” (p. 206)*

PBS, ABA and Aggressive Behaviour

- People with learning disabilities can be detained under the MHA 1983 (as amended by the MHA 2007)
- Detention is required for the person's health and safety or for the protection of others
- Learning disability is defined as “a state of arrested development of the mind which includes significant impairment of intelligence and social functioning”
- Hospital detention on the basis of learning disability must be qualified by either:
 - Abnormally aggressive behaviour, or:
 - *Seriously irresponsible conduct*

Interventions for Challenging Behaviour – *Evidence 1*

- **The most significant literature concerning treatment for challenging behaviour in people with ID involves interventions based on applied behavioural analysis principles**
- **Earlier reviews of mainly antecedent control and contingency management approaches found evidence to support the use of these interventions in reducing problem behaviour, including aggression:**
 - **Lennox et al. (1988) *AJMR***
 - **Scotti et al. (1991) *AJMR***
 - **Whitaker (1993) *BJCP***
 - **Carr et al. (2000) *RiDD***

Interventions for Challenging Behaviour – *Evidence II*

Themes that emerged from these reviews were that:

- Less intrusive interventions were more effective than more intrusive and restrictive techniques**
- Transferability and generalisation had not been addressed outside of highly staffed environments**
- Aggression and externally directed behaviour problems were associated with lower treatment effects**
- The majority of interventions reported involved participants with more severe levels of ID**

Interventions for Challenging Behaviour – *Evidence III*

Didden et al. (2006) *AJMR*

- **Meta-analysis of single subject research concerning behavioural treatment of challenging behaviour in people with “mild mental retardation”**
- **Identified 80 papers published between 1980 and 2005 that involved 119 participants**
- **The *external destructive* category (incorporating aggressive and destructive behaviour) showed the lowest treatment effects**

Interventions for Challenging Behaviour – *Evidence IV*

- **Heyvaert et al. (2012) *RiDD***
- **Meta-analytic review of small *n* and single-case research on interventions for reducing challenging behaviour in IDD**
- **Included 285 studies reporting on 598 participants published between 2000 and 2011**
- **Just 16% of participants were in the mild range of disability – with 23% moderate, 31% severe and 30% profound**
- **Interventions were significantly less effective for outwardly directed aggression (i.e. aggression and destructive behaviour) when compared to other types of challenging behaviour**

Interventions for Challenging Behaviour – *Evidence VI*

Consistent findings in the literature are:

- **Behavioural interventions are less effective with people with mild ID**
- **Behavioural interventions are less effective with aggression and externally directed behaviour problems**
- **This is potentially very important with respect to the use of PBS and/or ABA in forensic settings**

LD Offender Pathway Study – *antisocial and offending behaviour (N = 477)*

- Ref. O'Brien, Taylor, Lindsay, Holland et al. (2010). *JofLD&OB*

Index Antisocial/Offending Bhr	Frequency (%)
<i>Offences against the person</i>	
Physical aggression	238 (50)
Verbal aggression	158 (33)
Inappropriate sexual - contact	69 (15)
Inappropriate sexual – non-contact	67 (14)
Cruelty/neglect of children	28 (6)
Stalking behaviour	9 (2)

Inpatient ID Secure Services Populations

- At admission all are detained under sections of the mental Health Act 1983
- Median full scale IQ:
 - 69.0 (Novaco & Taylor, 2002)
 - 68.0 (Taylor & Novaco, 2016)
- High levels of personality disorder:
 - 40% (Lindsay et al., 2006)
 - 48% (Taylor & Novaco, 2013)

Adult Medium Secure Services - National Service Specifications NHS-E 2018

- **‘Medium secure inpatient services provide care for those who pose a serious risk to others and require physical security that prevents escape from hospital .’ p.13**
- **The core objectives (p.6) include:**
 - **Reduce the risk of harm to others**
 - **Risk is mentioned 86 times in 41 pages**
- **‘The service must provide evidence-based specialist assessment, care and treatment including:**
 - **Reduction and/or management of risk ... through the provision of specialist offence-related treatment programmes ... that address offending and risk behaviours**

Risk-Need- Responsivity Model

- **RNR (Andrews & Bonta, 2010) is the established model to address risk needs and reduction in forensic settings**
- **Best outcomes obtained by targeting intensive interventions at high risk individuals**
- **Focus on criminogenic needs (dissocial attitudes/cognitions and skills training)**
- **Using offence-specific interventions**
- **Incorporating cognitive-behavioural interventions**

McGuire (2018) *What works in reducing offending?*

NICE Guideline 11 on 'Challenging Behaviour and Learning Disabilities' (May 2015) – CBT

Review question:

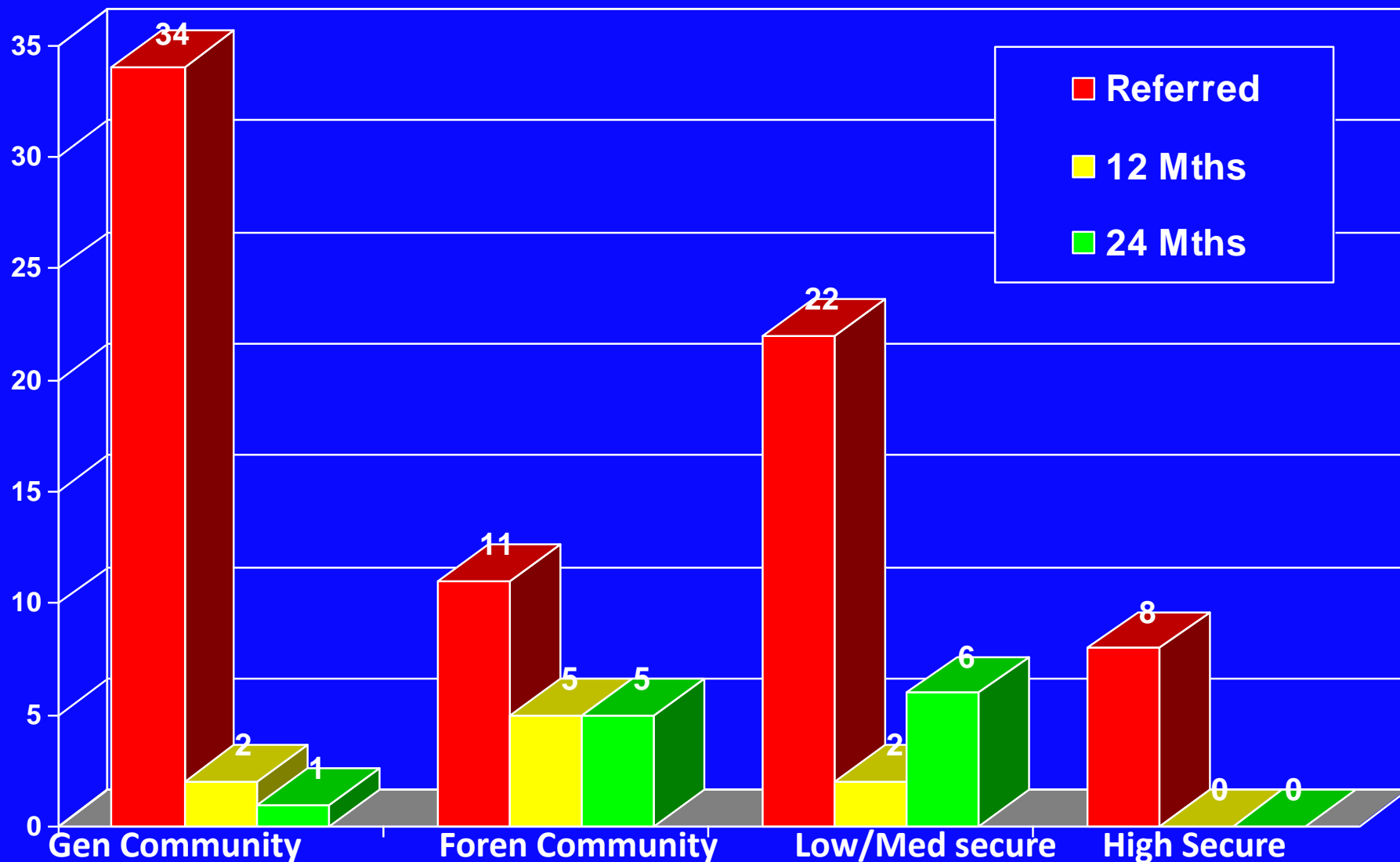
- *In people with a learning disability and behaviour that challenges, what are the benefits and potential harms associated with psychosocial interventions aimed at reducing and managing behaviour that challenges?*

Recommendation 43, p.255:

'Consider individual psychological interventions for adults with an anger management problem. These interventions should be based on cognitive-behavioural principles and delivered individually or in groups over 15–20 hours.'

Treatment Over 24 Months – Violent Index Offences

Lindsay et al. (2012) Psychiatry, Psychology & Law



Conclusions

- **PBS is not clearly defined and is thus difficult to operationalise**
- **The evidence base for PBS is very limited – particularly in forensic settings**
- **ABA has a stronger evidence base in relation to challenging behaviour and ID**
- **However, its application to high functioning people with ID who display low frequency/high impact behaviours in forensic settings is unproven**
- **Evidence-based (RNR) approaches for this population are frequently not delivered in forensic settings**

Future Directions and Challenges

- **PBS needs to be more precisely defined in forensic settings**
- **The training and supervision requirements need to be clarified for its safe and effective implementation in these settings**
- **The evidence base needs to be developed to justify its use with people with ID and forensic needs**

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NICE Guideline 11 on 'Challenging Behaviour and Learning Disabilities' (May 2015) – *Behaviour Support Plans*

Recommendation 33, p. 171:

- **Develop a written behaviour support plan for [people] with a learning disability and behaviour that challenges that is based on a shared understanding about the function of the behaviour. This should:**
- **Identify proactive strategies designed to improve the person's quality of life and remove the conditions likely to promote behaviour that challenges, including:**
 - *changing the environment (for example, reducing noise, increasing predictability)*
 - *promoting active engagement through structured and personalised daily activities, including adjusting the school curriculum for children and young people*

NICE Guideline 11 on 'Challenging Behaviour and Learning Disabilities' (May 2015) – *Behavioural Interventions*

Recommendation 42, p. 255:

- Consider personalised interventions for children, young people and adults that are based on behavioural principles and a functional assessment of behaviour, tailored to the range of settings in which they spend time, and consist of:
 - *Clear targeted behaviours with agreed outcomes*
 - *Assessment and modification of environmental factors that could trigger or maintain the behaviour*
 - *Addressing staff and family member or carer responses to behaviour that challenges*
 - *A clear schedule of reinforcement of desired behaviour and the capacity to offer reinforcement promptly*
 - *A specified timescale to meet intervention goals*

Positive Behaviour Support within Forensic Settings for People with Intellectual Disabilities

Professor Peter Langdon



NHS
Coventry and
Warwickshire Partnership
NHS Trust

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International Journal of Positive Behavioural Support

Special Issue – Positive Behaviour Support in Secure/Forensic Settings



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Managing challenging behaviour using applied behavioural analysis and positive behavioural support in forensic settings: A systematic review – Collins, Barnoux and Baker

- Some of the barriers associated with PBS included:
 - Lack of resources (money, time, staff, training).
 - Conflicting models of care. PBS vs. restriction (and punishment in some settings like prisons).
 - Lack of organisational support.
 - Difficulties with collaborative working, and inconsistency in delivery of interventions.
 - Belief that behaviours must have consequences.
 - PBS is burdensome.
 - Difficulties with engaging people with intellectual disabilities in co-production when they are not motivated or have severe and enduring mental illness.

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Positive Behaviour Support (Barnoux and Langdon, 2021)

1. Positive behavioural support is a framework for developing and delivering interventions. Positive behavioural support plans are person centred and no two plans are the same.
2. There is a strong focus upon self-determination, outcomes that are meaningful for people, and increased social inclusion and plans can be used with those who are at risk of encountering criminal justice agencies.
3. Positive behavioural support plans are developed using functional analysis and a psychological formulation. Interventions are organised into proactive, secondary prevention and reactive strategies.
4. Positive behavioural support plans are a **vehicle for organising the delivery of care**. A range of interventions can be included within a positive behavioural support plan. For example, making changes to the environment, such as providing supervision, or ensuring that someone does not live in a particular area where risk may be greater, providing anger management training and other psychological therapies that reduce criminogenic risk, or using differential reinforcement strategies or functional communication training. Interventions vary from person to person as it is formulation-driven and therefore tailored and individualised. **They can also include medication. It not just a description of what someone likes or dislikes, or what they look like when upset.**

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Positive Behaviour Support (Barnoux and Langdon, 2021)

Table 1. Key components of positive behavioural support (adapted from Gore et al., 2013)

Values	1. Prevention and reduction of behaviour that challenges (or offending-like or criminal behaviours) occurs within in the context of increased quality of life, inclusion, participation, and the defence and support of valued social roles.
	2. Constructional approaches to intervention design build service user skills and opportunities and reduce aversive and restrictive practices
	3. Service user and carer involvement to inform, implement, and validate assessment and intervention practices
Theory and Evidence Base	4. An understanding that challenging behaviour (or offending-like or criminal behaviours) develops to serve important functions for people
	5. The primary use of behavioural science to assess and support behaviour change
	6. The secondary use of other complementary, evidence-based approaches to support behaviour change at multiple levels of a system
Process	7. A data-driven approach to decision making at every stage
	8. Functional assessment to inform function-based intervention
	9. Multicomponent interventions to change behaviour (proactively) and manage behaviour (reactively)
	10. Implementation support, monitoring, and evaluation of interventions over the long term



Positive Behaviour Support (Barnoux and Langdon, 2021)

- There are similarities between some forms of challenging behaviour and criminal offending behaviour. The function may be the same, but the topography is different.
- **Aspects of topography may be identical between people (e.g., punching someone in the face with a close fist repeatedly), but the same behaviour may not be construed as “criminal”.**
- **This is often associated with the nature and degree of intellectual disability.**
- Criminal justice agencies may not act as a behaviour is not been seen to be criminal.
- Lack of *Mens rea*

Discretion

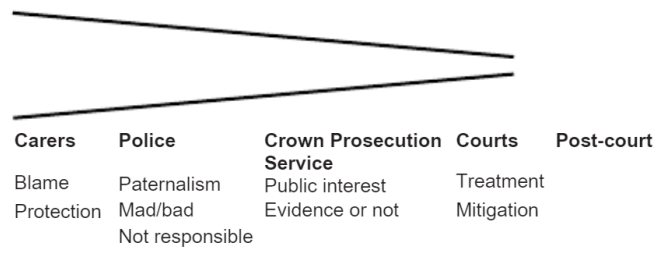


Figure 1 Factors influencing progress through the criminal justice system.

Journal of Intellectual Disability Research
VOLUME 46 SUPPLEMENT 1 pp 6-20 MAY 2002

mini-review

Prevalence of ‘criminal offending’ by men and women with intellectual disability and the characteristics of ‘offenders’: implications for research and service development

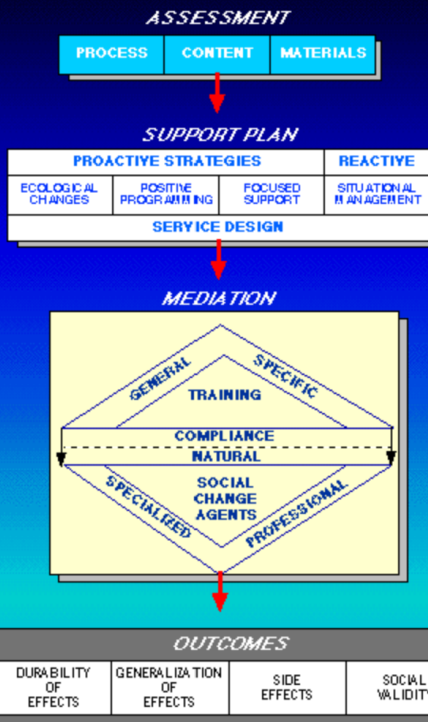
T. Holland, I. C. H. Clare & T. Mukhopadhyay
University of Cambridge, UK



**A Multielement Model
for Breaking the Barriers to Social and Community Integration**

INDEPENDENT VARIABLES

DEPENDENT VARIABLES



Positive Behaviour Support – LaVigna and Willis



Ecological Changes – e.g., antecedent control strategies

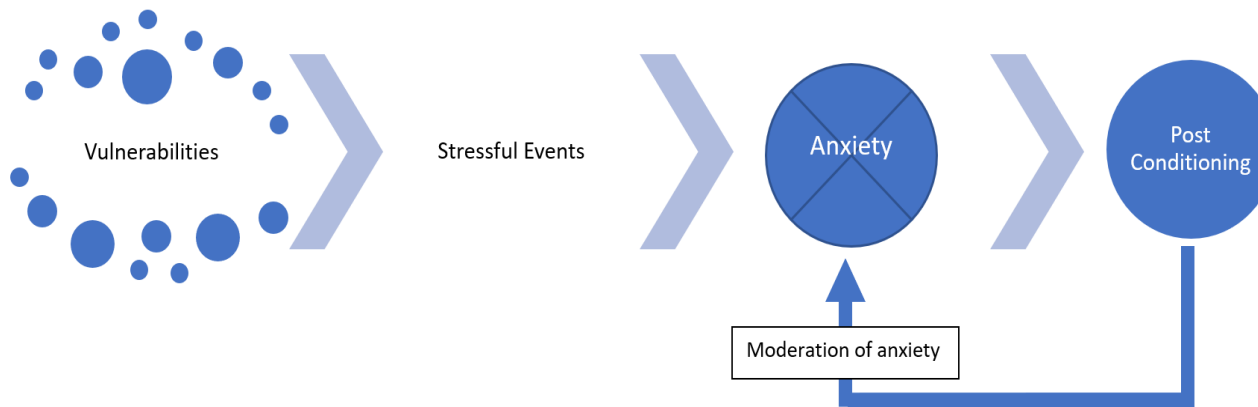
Positive Programming – e.g., teaching skills, teaching functionally equivalent skills. I broaden to include psychological therapies (e.g., anger management training, treatment for mental illness, treatment for sexual offending) and other interventions.

Focused Support – e.g., differential reinforcement.

PBS is not just focused support.



Figure 1: As depicted, contemporary learning theory postulates that anxiety disorders develop as a consequence of direct and vicarious learning experiences which are affected by a variety of factors including pre-existing vulnerabilities, the predictability and controllability of stressful events, and temporal proximity to stressful events. Additional factors such as sensory sensitivity, intellectual disabilities, restricted and repetitive behaviours, and lack of flexibility are markedly relevant for those with autism and moderate to severe intellectual disabilities. Further, the experience of anxiety is moderated by events that occur post-learning; for example, the nature and degree of avoidance behaviours, generalisation of anxiety, and additional stimuli which inflate or decrease anxiety, and directly inform interventions such as exposure therapy.



Learning theory

The theory that directly informs many well-established psychological therapies including those recommended by NICE.

These are used to treat mental illness in children, adolescents, and adults with and without intellectual disabilities.

For example:

1. Behavioural activation for depression
2. Exposure and response prevention for obsessive compulsive disorder and other anxiety disorders. Exposure (e.g., imagined, real etc.) is used in a variety of talking psychological therapies.
3. Relaxation training.

All psychological therapies involve teaching skills.



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Working in community settings with people with learning disabilities and autistic people who are at risk of coming into contact with the criminal justice system.

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Chapter 6: Positive behaviour support

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People with learning disabilities and autistic people said:

- // Staff need to have the right attitudes and understand our risk and support us to understand our risk and a PBS plan can help with this.
- // PBS has got your treatment on it and your background, but it can change, and you must make sure that you tell everyone because they can help manage your risk.
- // We need to be involved in it and they need to help us understand it so we can understand our risk.

People with learning disabilities and autistic people said:

- // Helping us to understand and communicate is part of PBS. Sometimes, we need to learn new ways of communicating, but we aren't helped.
- // I used to have pictures on my PBS plan, which helped me, and now I don't.
- // Staff need to understand your PBS plan. Make sure you educate staff about PBS plans.
- // PBS plans should include our RP (relapse prevention) plan and treatment so that everyone knows what to do to keep us safe.

People with learning disabilities and autistic people said:

- // It is important that PBS plans are ours and personal to us because everyone can be different. They should not be bog standard because everyone is different.
- // It is important to put pictures in them to help us understand and make it around the person. Don't copy and paste. Make it individual.



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Conclusions

1. **PBS is a framework for the delivery of care. It is only as good as your formulation and the interventions you include. *It not just a description of what someone likes or dislikes, or what they look like when upset.***
2. **You need to include interventions linked to a formulation. This can include talking psychological therapy, or other types of psychological therapies. This could include Relapse Prevention Plans, medication and other proactive strategies such as focused support strategies (e.g., DRO), teaching alternative and functionally equivalent behaviour, including communication and ecological changes such as antecedent control strategies.**
3. **There is evidence that behavioural support plans (which can be nested within a PBS framework) help with challenging behaviour. We know substantially less about effectiveness within a forensic context.**
4. **Note that NICE does recommend behaviour support plans for people with learning disabilities who have challenging behaviour.**