

When Service History Becomes Behavioural History: A Trauma-Responsive Framework for Understanding Aggression and Self-Injury

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ABSTRACT

People with autism and intellectual or developmental disabilities who present with aggression, self-injury, or other behaviours described as challenging may encounter multiple and fragmented systems of support. Functional behavioural assessment appropriately examines antecedents, consequences, function and environmental variables, but this paper argues that, for people with extensive service involvement, the relevant behavioural context may also extend across time. The paper proposes that repeated interactions with services may become part of a person's behavioural history when those interactions repeatedly alter the consequences of communication, refusal, help-seeking, participation or escalation.

The paper distinguishes this proposal from established behavioural practice and from trauma-based causal explanations. Trauma and adversity are treated as possible contextual variables, not assumed causes of aggression or self-injury. The proposed Trauma-Responsive Behavioural Framework (TRBF) integrates person and developmental history, current functional assessment, service history, communication, autonomy, organisational contingencies and behavioural repertoire. Its specific conceptual extension is temporal: repeated service interactions may influence subsequent behavioural expectations and the contingencies through which current service encounters are experienced.

The framework is conceptual and hypothesis-driven rather than empirically validated. It defines its principal constructs, identifies propositions that can be empirically tested, and specifies observable indicators through which the proposed relationships could be examined. The paper therefore contributes not a new functional assessment procedure, but a broader formulation in which service history is considered a potentially relevant layer of behavioural history. Its central question is whether understanding what has repeatedly happened between a person and their services can improve understanding of what happens next.

Keywords: autism; intellectual and developmental disabilities; trauma-responsive practice; challenging behaviour; aggression; self-injury; behavioural assessment; service systems; functional analysis; autonomy

INTRODUCTION: WHEN BEHAVIOUR BECOMES THE FOCUS

When a person repeatedly presents with aggression, self-injury, property destruction, refusal, withdrawal, or other behaviours described as *challenging*, the response of services is often understandably focused on immediate risk. Practitioners need to understand what has happened, what may have triggered the behaviour, how frequently it occurs, its severity, and how the likelihood or impact of the behaviour might be reduced. These are important questions, particularly where behaviour presents a risk to the individual or others. However, they are not sufficient on their own to understand the person or the circumstances in which the behaviour occurs.

For some autistic adolescents and adults, particularly those with complex mental health, communication, developmental, or social needs, challenging behaviour can become the organising feature around which their contact with services is structured. Referrals may be initiated because of the behaviour, assessments may focus

predominantly on its frequency and severity, risk management plans may be developed around its prevention or containment, and interventions may ultimately be judged according to whether the behaviour decreases. Guidance concerning behaviours that challenge similarly places considerable emphasis on assessment, intervention and risk management, making it important to consider what happens when the behavioural presentation becomes the dominant lens through which the person is understood (NICE, 2015; Reyes-Martín et al., 2022). Over time, there is a risk that the behaviour becomes more visible than the person experiencing it. The person can become secondary to the presentation, while the history, relationships, environments, and experiences surrounding that presentation receive considerably less attention.

This can influence how individuals are understood within services. A young person who repeatedly refuses appointments may be described as non-compliant or resistant to intervention. An adult who becomes aggressive during an assessment may be characterised as difficult to engage. A person who repeatedly self-injures may come to be understood primarily through the lens of risk, while someone who withdraws from professionals may be viewed as disengaged or unwilling to participate. Such descriptions may accurately capture what is observable, but they do not necessarily explain why the behaviour is occurring or what function it serves for the individual. Functional assessment is therefore critical because behavioural topography alone cannot establish the variables responsible for its occurrence or maintenance (NICE, 2015; Reyes-Martín et al., 2022). More importantly, a narrow behavioural description can obscure the possibility that the person's response is shaped by previous experiences, current environmental conditions, communication difficulties, perceived loss of control, or the cumulative history of interactions with services.

Behaviour does not occur in a vacuum. Contemporary guidance concerning autistic people who present with behaviour that challenges explicitly recognises the importance of communication, physical and mental health, sensory and environmental conditions, social circumstances, changes in routine, developmental transitions, predictability, and experiences such as abuse or exploitation (NICE, 2015). NICE guidance therefore recommends functional assessment and consideration of environmental and other contributing factors when developing interventions, rather than approaching challenging behaviour solely as a characteristic located within the individual (NICE, 2015). This is consistent with a fundamental behavioural proposition: behaviour occurs within an environment, and understanding that environment is essential to understanding behaviour.

The difficulty is that the environment is often conceptualised too narrowly. A behavioural assessment may appropriately examine what happens immediately before and after an episode of aggression or self-injury, identifying antecedents and consequences that may contribute to its occurrence and maintenance. For individuals who have experienced years of involvement with educational, medical, behavioural, social-care, and mental-health systems, however, the relevant behavioural environment may extend considerably beyond the immediate circumstances surrounding an episode. The appointment itself may be an antecedent, but so too may be the person's accumulated experience of previous appointments. A professional's question may appear to be an immediate trigger, while its significance may be shaped by previous experiences of not being believed, understood, or listened to. A change in routine may precede escalation, but the response to that change may also reflect a history of unpredictable transitions and limited opportunities to influence what happens next. This broader temporal perspective is consistent with evidence that behavioural presentations among people with intellectual disabilities are influenced by interacting behavioural, psychiatric and psychosocial factors rather than by isolated immediate triggers (van den Akker et al., 2021).

The same principle applies to the responses of services following an episode of challenging behaviour. A restrictive or physical intervention may successfully interrupt an immediate behaviour and, where there is significant risk, may sometimes be necessary to maintain safety. However, the experience may also influence what the person subsequently learns about professionals, relationships, safety, control, and their own ability to influence what happens to them. Similarly, repeated experiences in which distress results in increased surveillance, loss of choice, removal from preferred environments, or further professional intervention may alter the individual's expectations of future service contact. These possibilities should not be assumed to explain any particular person's behaviour; rather, they represent hypotheses that require careful, individualised assessment. This consideration is consistent with trauma-informed principles concerning safety, trust, empowerment, voice and choice, and the avoidance of retraumatisation (SAMHSA, 2014).

This raises a broader question for behavioural and trauma-responsive practice: what happens when the system designed to provide support becomes part of the behavioural history against which future interactions occur? For a person with extensive and sometimes difficult experiences of service involvement, the current environment cannot necessarily be understood independently of that history. Previous interactions may shape expectations, emotional responses, communication, avoidance, trust, and the strategies an individual has learned to use when attempting to influence their circumstances.

This question sits at the intersection of behavioural science and trauma-responsive practice. A behavioural perspective encourages examination of the contingencies surrounding behaviour, while a trauma-responsive perspective asks practitioners to consider how experiences of adversity, threat, loss of control, and relational disruption may influence the person's current responses and their expectations of others (McNally et al., 2021; SAMHSA, 2014). Bringing these perspectives together does not mean assuming that challenging behaviour is caused by trauma, nor does it mean abandoning functional assessment in favour of a trauma explanation. Rather, it creates an opportunity to examine behaviour within a broader history of learning and experience, including the possibility that repeated interactions with support systems have themselves become behaviourally and relationally significant.

At the centre of this approach is the person rather than the presentation. Understanding aggression or self-injury remains important, but so too is understanding what the individual is experiencing, what the behaviour may accomplish, what environmental conditions contribute to it, and what opportunities the person has to communicate, refuse, choose, and exercise meaningful control over their own life. The aim is not simply to reduce behaviour, but to understand the conditions under which it occurs and to consider how those conditions might be changed in ways that increase safety, autonomy, participation, and quality of life.

This paper is conceptual rather than a systematic review or empirical evaluation. It develops its argument through a critical synthesis of literature concerning behavioural assessment, behaviours that challenge, aggression, and self-injury, trauma and intellectual and developmental disability, autistic people's experiences of mental-health and support services, self-determination, organisational environments and trauma-responsive practice. The literature is used to establish relevant empirical evidence, identify areas of convergence and tension, and provide a foundation for the conceptual propositions advanced. The Trauma-Responsive Behavioural Framework (TRBF) proposed in this paper therefore represents a conceptual synthesis of these bodies of literature rather than an empirically validated intervention model. Where evidence is population- or context-specific, this is distinguished from the broader conceptual argument rather than assuming that findings are interchangeable across populations.

1.1 From Behavioural Presentation to Behavioural Context

The concern, therefore, is not that behavioural assessment asks the wrong questions, but that those questions may sometimes be considered within too narrow a frame. Functional assessment remains fundamental to understanding behaviour that challenges. It requires practitioners to identify patterns of behaviour, relevant antecedents and consequences, the function behaviour may serve, and the personal and environmental variables associated with its occurrence and maintenance (NICE, 2015). Importantly, NICE guidance already recognises that assessment should extend across the person's daily routines and usual environments and should consider current and past personal and environmental factors, previous interventions, care and educational settings, and the role of services, staff and carers in developing or maintaining behaviour (NICE, 2015). The issue proposed here is therefore not a rejection of functional assessment, but a question about how broadly the *context* of that assessment is understood.

For a person with limited or intermittent contact with services, the immediate circumstances surrounding an episode may provide a substantial proportion of the relevant behavioural information. For someone who has spent years moving between educational, medical, behavioural, mental-health, social-care, day-service or residential environments, however, the relevant context may be considerably more extensive. The antecedent to an episode may be an appointment, a transition, a demand or an interaction with a particular professional, but the significance of that event may have been shaped by what has happened during previous appointments,

transitions, demands or professional relationships. NICE guidance concerning autistic adults similarly recommends considering past history of care and support alongside physical and social environments, communication, changes in routine, and previous responses to intervention when assessing behaviour that challenges (NICE, 2015). The behavioural context is therefore not necessarily confined to what happened immediately before the behaviour; it may include the learning history through which the present environment has acquired meaning.

This difference is particularly important when considering the role of services themselves. NICE guidance explicitly recommends assessing the role of the service, staff, family members or carers in developing or maintaining behaviour and recognises that environmental conditions and staff responses may contribute to the development or maintenance of behaviour that challenges (NICE, 2015). This creates an important conceptual opening: the service is not necessarily external to the behavioural system being assessed. The routines, demands, communication practices, staffing arrangements, responses to distress, opportunities for choice, and consequences following behaviour may all form part of the environment in which behaviour occurs. In some circumstances, therefore, the appropriate unit of analysis may extend beyond the individual and immediate episode to include the interaction between the person and the system providing support.

This broader view is particularly relevant where behaviour occurs across multiple settings or appears to change according to context. The same behaviour may occur frequently in one environment and rarely in another, or may be associated with particular staff, routines, activities or forms of communication. NICE guidance specifically recommends identifying the events, times and situations in which behaviour does and does not occur across the person's usual environments, rather than examining behaviour in isolation (NICE, 2015). Such variation provides an important behavioural signal. If the behaviour changes when the environment changes, then characteristics of that environment become relevant to formulation. The question is not simply *what is different about the person in this setting?*, but also *what is different about the setting in which the person is responding?*

The temporal dimension is equally important. Behavioural contingencies operate in the present, but their effects accumulate through repeated interactions. A single experience of having a request refused may have little observable consequence. Repeated experiences in which communication does not produce meaningful environmental change may, however, alter the relative value or effectiveness of alternative responses. Similarly, a single unpredictable transition may be manageable, while repeated experiences of abrupt change may influence expectations about future transitions. These are hypotheses rather than assumptions about any individual, but they illustrate why behavioural formulation may need to consider patterns across time rather than treating each episode as an independent event. Behavioural science provides the conceptual tools for examining such contingencies; a trauma-responsive perspective adds attention to how previous experiences of threat, loss of control, relational disruption or adversity may influence the significance of subsequent interactions.

This is also where the distinction between behavioural presentation and behavioural context becomes important. A behavioural presentation describes what can be observed: aggression, self-injury, refusal, withdrawal, property destruction or another behaviour. Behavioural context encompasses the conditions in which that presentation occurs, the consequences that follow it, the person's history of learning, the relationships involved, the opportunities available for communication and choice, and the wider environments through which support is delivered. The latter does not replace the former. Precise description and measurement remain essential, particularly where risk is significant. Rather, the broader context provides the information needed to interpret what the observed behaviour may mean and what variables may be contributing to its persistence.

This division also prevents trauma from becoming a substitute explanation for behavioural function. A history of adversity may be relevant without being the cause of a particular behaviour. Equally, the absence of a disclosed trauma history does not establish that previous experiences are behaviourally irrelevant. The appropriate response is to treat trauma history, service history, communication, physical and mental health, environmental conditions and behavioural contingencies as potentially interacting variables within an

individualised formulation. This is consistent with trauma-informed approaches that emphasise safety, trust, collaboration, empowerment, voice and choice, while avoiding assumptions about how any individual will respond to adversity (SAMHSA, 2014).

The proposed shift can therefore be expressed simply: from asking only what precedes the behaviour to asking what surrounds, precedes, follows and has historically shaped the behaviour. This does not mean that every behaviour requires an exhaustive reconstruction of a person's life history. Assessment should remain proportionate to the complexity and severity of the presentation, as NICE recommends. It means that where behaviour is persistent, severe, context-dependent, resistant to intervention, or occurring within extensive service involvement, practitioners should consider whether the immediate behavioural episode represents only one part of a much larger behavioural system (NICE, 2015).

This broader formulation becomes particularly important for people whose lives are substantially organised around services. For an adult who spends most weekdays in a day programme, or who lives within a residential setting, the service environment may constitute a significant proportion of their social and behavioural world. In such circumstances, questions about staffing, routine, communication, activities, community access, choice, privacy and responses to distress are not simply questions about service quality. They may be directly relevant to behavioural formulation. NICE guidance already identifies the care environment, available activities, opportunities for choice, engagement, structure and predictability as factors that should be considered when assessing behaviour that challenges (NICE, 2015). The present framework extends this observation by proposing that, where service exposure is substantial, the service itself should be understood as part of the person's ongoing behavioural ecology.

The move from behavioural presentation to behavioural context therefore provides the conceptual bridge for the remainder of this paper. It allows behaviour to remain observable, measurable and functionally assessed while recognising that the variables influencing it may extend across relationships, environments and time. It also creates space for the central questions that follow: *what happens when the environments intended to provide support become part of the person's behavioural history, and how might experiences of adversity, loss of control and repeated service contact influence the way those environments are subsequently experienced?*

1.2 Establishing the Boundary: What Is Known and What Is Proposed

A central purpose of this paper is to make explicit where its argument rests on established behavioural knowledge and where it introduces a new conceptual extension. Functional behavioural assessment already provides a well-established method for examining relations among behaviour and environmental variables. It can include antecedents, consequences, behavioural function, learning history, communication, health, setting events, staff responses and variation across settings. NICE guidance also explicitly directs practitioners to consider the role of services, staff and carers and to examine behaviour across usual environments (NICE, 2015). The present framework does not claim these elements as new.

The proposed contribution begins at a narrower point. The paper asks whether repeated interactions with services can become behaviourally relevant beyond the immediate episode in which they occur. Specifically, it proposes that repeated service contingencies may contribute to behavioural expectations about communication, refusal, assistance, control and professional interaction, and that these expectations may alter how later service cues function. This temporal extension is a theoretical proposition. The existing literature cited in this paper provides relevant foundations—such as evidence concerning environmental influences, organisational contingencies, autonomy, service experiences and reciprocal staff–person interactions—but it does not, by itself, establish the full temporal pathway proposed here.

The distinction matters because the framework should not be presented as though the central proposition has already been demonstrated. The evidence supports the component relationships to varying degrees; the integration of those relationships into a temporal model of service history is the author's conceptual synthesis. The propositions that follow are therefore intended to make that synthesis explicit and empirically testable.

Table 1. Evidence boundary between established behavioural principles and the proposed temporal extension.

Domain	Established evidence in the paper	What the present framework adds	Status
Functional behavioural assessment	Antecedents, consequences, function, learning history and environmental variables are relevant to formulation; assessment should consider behaviour across contexts (NICE, 2015).	No new FBA procedure is claimed. The framework extends the temporal and systemic scope of formulation.	Established foundation
Service and organisational variables	NICE identifies the role of services, staff and carers; organisational research links service conditions and support practices with behavioural outcomes.	The service is treated explicitly as part of the person's ongoing behavioural environment rather than only as the setting where intervention is delivered.	Supported synthesis
Autonomy, communication and choice	Evidence supports self-determination, supported decision-making, communication access and environmental opportunities for participation (Kuld et al., 2023; Sheerin et al., 2026).	The framework proposes that the functional effectiveness of communication and refusal should be examined as part of the current contingency system.	Supported synthesis / hypothesis
Trauma and adversity	People with intellectual/developmental disabilities may experience trauma and adversity; trauma-responsive practice emphasises safety, trust, voice, choice and empowerment (McNally et al., 2021; SAMHSA, 2014).	Trauma-related experience is incorporated as contextual information without treating it as the cause or function of behaviour.	Established evidence + conceptual integration
Cumulative service experience	Research and guidance support considering previous interventions, service context and interactional history.	The framework proposes a temporal pathway in which repeated service interactions may influence later behavioural expectations and the significance of subsequent service cues.	Proposed hypothesis
Reciprocal service–person learning	Staff responses and service context can influence behavioural interactions (Ravoux et al., 2012; Olivier-Pijpers et al., 2019).	The framework proposes that reciprocal patterns may accumulate across repeated interactions and alter subsequent responding on both sides.	Proposed temporal extension

The following definitions are used throughout the paper to prevent key concepts from functioning as broad or metaphorical terms.

1.3 Operational Definitions

Table 2. Operational definitions of principal constructs.

Construct	Operational definition for this paper	Potential observable indicators
Service history	The cumulative pattern of interactions with health, education, disability, mental-health, behavioural, social-care, day-service and residential systems, including interventions, restrictions, transitions, staffing changes, communication experiences and opportunities for choice over time.	Duration/intensity of service involvement; transitions; documented interventions/restrictions; staff continuity; opportunities for communication, refusal and choice.

Cumulative service experience	The repeated pattern of service contingencies experienced across interactions rather than a single event or isolated episode.	Repeated instances in which communication, refusal, help-seeking or escalation produce similar or changing consequences.
Behavioural expectations	Patterns of responding that suggest what a person has learned to predict about a class of service interactions or cues; assessed through observed responding rather than inferred from history alone.	Response probability/latency following service cues; approach/avoidance; use of communication or refusal; accessible self-report where available.
Service contingency	An observable relation between a person's behaviour and the environmental consequence delivered by a service, staff member or organisational process.	What follows requests, refusal, escalation, help-seeking or participation; consistency, immediacy and magnitude of consequences.
Behavioural ecology	The dynamic interaction among person, learning history, current contingencies, relationships, physical/social environment, organisational conditions and behavioural repertoire across settings and time.	Cross-setting differences; interaction patterns; changes following environmental modification; longitudinal patterns.
Behavioural repertoire	The range, diversity and functional effectiveness of behaviours available for communication, participation, coping, refusal, help-seeking, negotiation and other valued outcomes.	Variety/effectiveness of responses; generalisation across people/settings; successful use of alternatives.
Meaningful autonomy	The person's practical opportunity, with appropriate support, to express preferences, refuse, choose, negotiate and influence decisions affecting their life.	Choices offered and acted upon; supported decisions; effectiveness of refusal; influence over routines/activities.
Trauma-related experience	A disclosed, documented or otherwise appropriately established experience of adversity or trauma that may be relevant to current formulation; it is not inferred solely from behaviour.	Documented/disclosed history; person's account where possible; contextual information; changes in responding associated with relevant contexts.

These definitions allow the framework to generate propositions that can be tested rather than remaining at the level of conceptual analogy.

1.4 Conceptual Propositions and Testable Predictions

The central proposition is deliberately narrower than the broader claim that “services shape behaviour.” The framework proposes that, where service involvement is repeated and behaviourally consequential, patterns of service interaction may become part of behavioural history and may influence how later service-related contingencies are experienced. This proposition can be broken into testable relationships:

Table 3. Testable propositions generated by the Trauma-Responsive Behavioural Framework.

Proposition	Testable prediction	Possible indicators/design
P1. Cumulative service experience and behavioural expectations	Greater exposure to repeated service contingencies characterised by ineffective communication, overridden refusal or unpredictable responses will be associated with more consistent avoidance, delayed engagement or escalation following comparable service cues, after accounting for relevant current variables.	Longitudinal observation; service-history coding; response latency/frequency; accessible self-report where possible.
P2. History ×	The relation between a current service cue and behaviour will	Repeated-measures or

current cue interaction	differ according to relevant prior service experience; comparable cues may produce different responding across individuals or across time as service history changes.	within-person designs comparing behaviour to comparable service cues.
P3. Reciprocal interaction across time	Staff responses following behaviour will predict subsequent staff and person responding, such that repeated interaction patterns become more stable over time.	Sequential analysis of person behaviour and staff responses across episodes; time-series/longitudinal data.
P4. Functional effectiveness of alternative communication	When lower-intensity communication or refusal reliably produces meaningful environmental consequences, reliance on higher-intensity behaviour will decrease relative to conditions in which those alternatives are ineffective.	Multiple-baseline or repeated environmental-change designs; rates of communication/refusal and high-risk behaviour.
P5. Environmental change and behavioural repertoire	Changes to relevant service contingencies will be associated with expansion of effective behavioural alternatives and improved participation, not merely reduction in target behaviour.	Measures of alternative repertoire, participation, autonomy, target behaviour and environmental variables before/after change.
P6. Documentation and future service response	Descriptions of prior behaviour and risk will be associated with differences in subsequent staff expectations, opportunities for choice or intervention intensity, independent of current observed behaviour where measurable.	Vignette studies or longitudinal record-and-observation designs examining staff decisions and subsequent interactions.

These propositions are not presented as established findings. They specify what would need to be demonstrated for the central temporal extension to move from conceptual framework to empirically supported model. P1–P3 address the core claim concerning service history, behavioural expectations and reciprocal interaction; P4–P6 address practical mechanisms through which those patterns might be changed or maintained.

TRAUMA IS NOT INHERENT TO NEURODEVELOPMENTAL OR COGNITIVE DIFFERENCE

A central proposition of this paper is that neurodevelopmental or cognitive difference should not be conceptualised as inherently traumatic. Autism, intellectual disability, cognitive delay, developmental disability, and associated differences in communication, learning, sensory processing, or adaptive functioning are not themselves evidence of trauma, and these characteristics should not be pathologised through the language of trauma. At the same time, however, neurodevelopmental and cognitive differences do not exist independently of social, relational, and environmental conditions. People who require substantial support may encounter circumstances that increase their exposure to adversity or reduce their ability to exercise control over their environments, communicate distress, report experiences of harm, or access appropriate responses when difficulties arise. These circumstances may include bullying, social exclusion, exploitation, abuse, neglect, communication barriers, institutionalisation, restrictive practices, repeated placement or service changes, inadequate mental-health provision, family stress, sensory environments that are poorly adapted to individual

needs, and prolonged dependence on systems in which decisions are frequently made on the person's behalf. Research involving people with intellectual and developmental disabilities has identified significant exposure to traumatic experiences and multiple forms of adversity, while the literature has increasingly highlighted the need for disability-specific approaches to trauma-responsive practice rather than assuming that generic trauma frameworks adequately capture these experiences (McNally et al., 2021; Cook & Hole, 2021; Gur, 2026; Wilson et al., 2026).

The line of separation between neurodevelopmental difference and trauma is therefore essential. The presence of autism, intellectual disability, cognitive delay, or another developmental or cognitive difference should never be treated as evidence that a person has experienced trauma, nor should aggression, self-injury, withdrawal, refusal, or other behaviours that challenge automatically be interpreted as trauma responses. Such assumptions risk creating a different form of diagnostic overshadowing in which trauma becomes the explanation for behaviour without sufficient functional or contextual assessment. A trauma-responsive behavioural approach should instead recognise trauma and adversity as possible components of an individual's history that may interact with their developmental characteristics, current environment, communication repertoire, relationships, and learned behavioural patterns. The task is consequently not to determine whether a diagnostic category is inherently traumatic, but to understand the individual history and circumstances through which their current behaviour has developed and is maintained.

This difference carries significant weight for people who experience difficulties communicating internal states or describing previous experiences in ways that conventional services readily recognise. Communication differences may affect how distress, pain, fear, or other internal experiences are communicated, while cognitive or developmental differences may influence how a person understands, recalls, or communicates complex experiences. This does not mean that behaviour can simply be interpreted as a direct representation of an underlying emotional state. Rather, it means that practitioners may need to broaden the ways in which they seek information and understand behaviour. Functional assessment, observation, communication supports, collaboration with trusted people, consideration of environmental variables, and attention to the person's own preferences and choices can all contribute to a more accurate understanding. Research concerning trauma among people with intellectual disabilities has highlighted both the prevalence of traumatic experiences and the challenges involved in recognising and responding to trauma where communication or cognitive differences are present (McNally et al., 2021). The absence of a conventional verbal account should not therefore be treated as evidence that an experience did not occur, but neither should the presence of challenging behaviour be treated as proof that trauma has occurred.

The wider service context is equally important. Research examining autistic adults' experiences of mental-health services has identified difficulties involving communication, service accessibility, professional understanding, therapeutic relationships, and the fit between available services and autistic people's needs (Brede et al., 2022). Similar concerns arise more broadly across disability and developmental services, where individuals may experience repeated assessments, professional changes, transitions between placements or services, restrictive responses, and limited opportunities to influence decisions affecting their lives (Cook & Hole, 2021; Gur, 2026). These experiences are not necessarily traumatic in the clinical sense, and they should not automatically be labelled as such. Nevertheless, they can be behaviourally and relationally significant. Repeated experiences of being misunderstood, having choices constrained, encountering unpredictable changes, or having communication attempts fail may influence what a person comes to expect from future interactions and the strategies they develop for navigating them.

This becomes particularly significant when considering people who have spent much of their lives engaged with systems of care, education, behavioural support, health services, or social care. Their behavioural history may extend across years and across multiple environments, rather than being confined to the immediate circumstances surrounding a particular incident. A person who has repeatedly experienced demands without meaningful opportunities to refuse may learn that withdrawal, avoidance, or escalation is more effective than verbal refusal. Someone whose communication attempts have repeatedly failed may increasingly rely on behaviour that reliably produces a response from others. A person who has experienced frequent changes in professionals, placements, routines, or expectations may become highly sensitive to uncertainty or transition. These possibilities require individual assessment and should never be presumed, but they illustrate why the person's developmental and service history may be as relevant to understanding current behaviour as the immediate antecedent preceding an episode. This broader understanding is consistent with behavioural literature demonstrating that aggression and other behaviours that challenge among people with intellectual disabilities are associated with interacting behavioural, psychiatric and psychosocial factors (van den Akker et al., 2021).

The concept of autonomy is particularly important within this context. People with cognitive or developmental disabilities may require significant support to understand information, communicate preferences, assess options, or make decisions, but the need for support should not automatically be equated with an absence of agency. There is an important difference between supporting a person to make decisions and making decisions for them, particularly where decisions involve everyday participation, relationships, activities, treatment, communication, or how support is delivered. Recent qualitative evidence examining autonomy and decision-making from the perspectives of people with intellectual disabilities demonstrates the importance of opportunities for choice and control in everyday life (Sheerin et al., 2026). Where services routinely remove opportunities for choice because an individual is perceived as unable to decide, the resulting reduction in autonomy may itself become part of the person's experience of support. A trauma-responsive behavioural approach must therefore consider not only whether an intervention is effective in reducing risk or challenging behaviour, but also whether it preserves and strengthens the individual's ability to exercise voice, choice, control, and meaningful participation in decisions affecting their life.

This is not an argument that safety should be subordinated to autonomy or that practitioners should avoid necessary intervention where there is significant risk. Rather, it requires a more careful consideration of how safety can be achieved while preserving as much choice and control as possible. For individuals whose previous experiences may have involved coercion, restraint, institutional control, exploitation, or repeated decisions being made on their behalf, the opportunity to exercise meaningful choice may be particularly important. Trauma-informed frameworks identify empowerment, voice and choice alongside safety and collaboration as core principles, while emphasising the importance of avoiding retraumatisation (SAMHSA, 2014). The practical question therefore becomes not simply whether a person can make a particular decision independently, but what support, communication, environmental adaptation, time, information, or relational conditions could enable that person to participate as fully as possible in the decision.

Taken together, these considerations suggest that the relevant unit of analysis cannot be the individual's diagnostic or developmental characteristics alone. Autism, intellectual disability, cognitive delay, or developmental difference may shape how a person experiences and interacts with their environment, but the behavioural significance of those characteristics emerges through their interaction with relationships, opportunities, expectations, communication, contingencies, previous experiences, and access to autonomy. Trauma and adversity may form part of this history for some individuals, but they are not assumed to do so. The purpose of a trauma-responsive behavioural approach is instead to remain sufficiently curious about the person's history and environment to recognise when these factors may be relevant, while retaining the discipline of individualised functional assessment.

The implication is that the history of interaction between the person and the system becomes relevant. When a person has spent years moving through services, the system is not merely the context in which behaviour occurs; it may form part of the learning environment through which expectations, coping strategies, relationships, communication patterns, and opportunities for autonomy have developed.

Understanding that history may therefore be important to understanding not only why behaviour occurs, but also what needs to change if the person is to experience greater safety, agency, participation, and quality of life.

2.1 Trauma, Adversity and Unequal Vulnerability

Neurodevelopmental and cognitive differences do not constitute trauma, but the social and environmental circumstances in which people with these differences live can influence their exposure to adversity and their ability to access protection, communicate distress, and obtain appropriate support. This distinction is important because vulnerability to adverse experiences is not distributed equally across populations. People with intellectual and developmental disabilities may encounter increased exposure to interpersonal violence, abuse, neglect, exploitation, bullying, social exclusion, and other adverse experiences, while characteristics such as communication differences, dependence on others for daily support, and limited access to appropriate services may create additional barriers to recognition and response (McNally et al., 2021; Cook & Hole, 2021). The

issue is therefore not that disability itself produces trauma, but that the interaction between individual characteristics and social environments may create circumstances in which adversity is more likely to occur, less likely to be recognised, or more difficult to escape.

When considering autistic individuals, the clarification becomes increasingly clear. Autism is a neurodevelopmental difference rather than a traumatic condition, and autistic characteristics should not be interpreted through a deficit-based trauma framework. However, autistic people may experience environments that are poorly adapted to their communication, sensory, social, or support needs, while also encountering bullying, exclusion, exploitation, abuse, and difficulties accessing appropriate mental-health care. Research examining autistic adults' experiences of mental-health services has identified difficulties including communication barriers, inadequate understanding of autism, inappropriate service responses, and challenges establishing therapeutic relationships (Brede et al., 2022). These experiences do not establish trauma, but they demonstrate how the interaction between individual needs and service environments can create repeated experiences of misunderstanding, unmet need, and reduced control. The distinction between *being neurodevelopmentally different* and *experiencing adversity because of how environments respond to that difference* is therefore fundamental.

The literature concerning people with intellectual and developmental disabilities similarly suggests that trauma and adversity may occur within multiple domains rather than through a single category of event. McNally et al. (2021), in a scoping review of trauma experiences among people with intellectual disabilities, identified a broad range of traumatic experiences and highlighted the implications for assessment and support. Cook and Hole (2021) likewise identified the intersection of intellectual and developmental disability, trauma, and multiple or complex needs as an area requiring greater attention, particularly at organisational and systemic levels. More recent scholarship has further argued that trauma-responsive practice within disability services needs to account for disability-specific vulnerabilities and forms of everyday and structural harm, including the effects of institutionalisation, ableism and organisational practices (Gur, 2026). Together, this literature suggests that trauma-responsive practice cannot simply import assumptions from general populations without considering the particular social and service environments in which people with intellectual and developmental disabilities may live.

These environments can be particularly consequential where a person is substantially dependent upon others for everyday support. Dependence itself should not be equated with vulnerability to trauma, nor should receiving residential, educational, clinical, or day-service support be regarded as inherently harmful. However, dependence can alter the distribution of power within everyday interactions. A person may rely on staff or carers to access food, medication, transport, personal care, communication technology, preferred activities, community participation, or healthcare. Where opportunities to communicate preferences or refuse support are limited, the person's ability to influence their environment may consequently be constrained. This creates an important context for understanding adversity because experiences of control, choice, privacy, communication and participation may occur repeatedly within ordinary service interactions rather than only during identifiable traumatic events.

The concept of *cumulative adversity* is therefore particularly relevant. Trauma is often discussed in relation to discrete events, but people with intellectual and developmental disabilities may experience multiple forms of adversity across different stages of life and across different environments. These may include changes in caregivers, disrupted education, placement breakdown, repeated transitions between services, social exclusion, exploitation, restrictive practices, unmet health or mental-health needs, and repeated experiences of having decisions made on their behalf. Not every such experience constitutes trauma, and it would be inappropriate to collapse all difficult or restrictive experiences into a clinical trauma category. Nevertheless, their cumulative behavioural and relational significance warrants consideration. Repeated exposure to environments in which a person has little control, limited communication opportunities, or inconsistent relationships may contribute to expectations about what support involves and how effectively different forms of behaviour influence the environment.

Adversity refers broadly to difficult, harmful, or potentially destabilising experiences, whereas trauma

concerns the individual's response to experiences that overwhelm or threaten their capacity to cope and may have lasting psychological or behavioural consequences. The presence of adversity therefore cannot be assumed to produce trauma, and the presence of trauma cannot be inferred solely from behavioural presentation. A person may experience significant adversity without developing a trauma-related disorder, while another person may experience an event very differently. Trauma-responsive practice must consequently remain person-specific rather than treating exposure as equivalent to outcome.

The same caution applies to service-related experiences. Repeated assessments, restrictive interventions, professional changes, placement transitions, or experiences of not being listened to may be deeply significant for one person and less significant for another. Their behavioural relevance cannot be determined from the event alone. What matters is how the experience interacts with the person's history, communication, developmental profile, relationships, current environment, and subsequent learning. This is consistent with the broader behavioural literature, which demonstrates that aggression and other behaviours that challenge among people with intellectual disabilities are associated with interacting behavioural, psychiatric and psychosocial variables rather than a single causal pathway (van den Akker et al., 2021).

A trauma-responsive perspective therefore requires curiosity without assumption. Practitioners should remain open to the possibility that previous adversity, threat, loss, coercion, or relational disruption may be relevant to current behaviour, while resisting the temptation to interpret every behaviour through that lens. This is particularly important because trauma-informed practice can itself become reductive if practitioners begin to search for trauma as the explanation for behaviour rather than investigating what is happening in the person's present environment. The appropriate response is not to ask whether a person with a particular diagnosis has been traumatised, but whether there are experiences in this person's history that may be relevant to how they currently experience safety, relationships, demands, communication, choice, and control.

This approach also recognises that vulnerability can be produced or amplified by environments. A person may have significant communication abilities but lack an effective means of communicating within a particular service. They may be capable of making everyday choices but be offered few meaningful opportunities to do so. They may understand what is happening but have limited ability to alter it. Conversely, an environment that provides accessible communication, predictable relationships, meaningful choice, appropriate sensory conditions, and opportunities for participation may reduce some of the circumstances associated with distress. Vulnerability should therefore not be understood solely as an individual characteristic. It can emerge through the interaction between the person and the environment.

This has particular significance for a trauma-responsive behavioural framework because behavioural science provides a means of examining those interactions without assuming their meaning in advance. If a person becomes distressed during particular forms of interaction, the practitioner can examine what occurs before and after the behaviour, what consequences follow, what alternative responses are available, and whether the pattern changes when environmental conditions change. Trauma-responsive practice adds the question of whether previous experiences may have altered the person's expectations of those interactions. Neither perspective is sufficient on its own. Together, they allow the practitioner to consider both what the behaviour is doing in the present and what the present environment may represent in light of the person's history.

The resulting position is one of unequal vulnerability without inherent pathology. Neurodevelopmental and cognitive differences do not cause trauma, and behaviours that challenge do not prove trauma. However, the social, relational, and service environments in which people with these differences live may expose some individuals to greater adversity, fewer opportunities for control, and greater barriers to communicating or responding to harm. Recognising this does not require abandoning behavioural precision or individual responsibility. It requires expanding the formulation sufficiently to ask whether the person's developmental and cognitive characteristics, experiences of adversity, service history, current environment, and opportunities for autonomy are interacting in ways that are relevant to their current behaviour.

This provides the foundation for the next question: how should trauma history be incorporated into behavioural formulation without allowing trauma to become a new diagnostic explanation for behaviour? This becomes

central to ensuring that trauma-responsive practice remains individualised, function-based, and responsive to the person's actual experience rather than to assumptions associated with diagnosis.

2.2 From Trauma History to Behavioural Formulation

Recognising that a person may have experienced trauma or adversity does not, in itself, explain their behaviour. Trauma history is one potential component of a broader behavioural formulation, not a diagnostic shortcut. If aggression, self-injury, refusal, withdrawal, or other behaviours that challenge are automatically classified as trauma responses, practitioners may inadvertently replace one form of reductionism with another. The presence of trauma may be clinically relevant, but its relevance must be established through individual assessment and considered alongside developmental, biological, communicative, psychological, relational and environmental variables (McNally et al., 2021; van den Akker et al., 2021; Reyes-Martín et al., 2022).

Functional assessment therefore remains central to a trauma-responsive behavioural approach. Behavioural assessment asks what occurs before and after a behaviour, under what conditions it is more or less likely to occur, what consequences follow it, and what function it may serve for the individual. These questions remain necessary regardless of whether trauma is present within the person's history. NICE guidance recommends functional assessment for behaviours that challenge while also requiring consideration of physical and mental health, communication, environmental conditions, personal circumstances, previous interventions, and the responses of staff and carers (NICE, 2015).

Trauma-responsive practice should consequently broaden the formulation rather than replace it. The relevant question is not simply whether trauma has occurred, but whether and how experiences of adversity may interact with the variables currently influencing behaviour.

The same behavioural presentation may arise through very different pathways. Aggression may occur in response to pain, sensory overload, communication difficulty, an aversive demand, interpersonal conflict, loss of access to a preferred activity, fear, or a learned history in which escalation has reliably changed the environment. Self-injury may similarly be associated with biological, sensory, emotional, communicative or environmental variables, and multiple factors may operate simultaneously (de Winter et al., 2011; Furniss & Biswas, 2012; Minshawi et al., 2015). Trauma may form part of this picture for some individuals, but the behavioural topography itself cannot determine which explanation applies. A trauma-responsive formulation must therefore retain the behavioural discipline of identifying observable patterns and testing functional hypotheses rather than inferring cause from presentation.

At the same time, functional assessment can be strengthened by considering the person's learning and relational history. An immediate antecedent may have acquired significance through previous experiences. A request from a professional may be experienced differently by someone who has repeatedly encountered professionals who did not understand their communication. A transition may carry different behavioural meaning for someone who has experienced repeated placement changes or unpredictable changes in caregivers. A physical examination may be particularly difficult for an individual whose previous experiences of bodily control or restraint have been distressing. These possibilities should not be assumed, but they illustrate how historical variables may alter the motivational or discriminative properties of present events. The relevant question becomes not only *what happened immediately before the behaviour?*, but also *what might this event represent within the person's history?*

This broader temporal perspective is consistent with the multifactorial literature on behaviours that challenge. van den Akker et al. (2021) identified behavioural, psychiatric and psychosocial factors associated with aggression among adults with intellectual disabilities, emphasising the importance of considering multiple interacting influences. Reyes-Martín et al. (2022) similarly identified substantial variation in the assessment of challenging behaviour among people with intellectual and developmental disabilities and highlighted the importance of systematic assessment of individual and environmental variables. Such evidence supports a formulation in which trauma history can be considered alongside, rather than instead of, established behavioural and clinical variables.

Communication requires particular attention within this process. For some people, particularly those with limited spoken language or differences in receptive and expressive communication, the behavioural repertoire available for communicating distress, disagreement, discomfort or uncertainty may be restricted. However, it would be an oversimplification to conclude that challenging behaviour is therefore necessarily "communication". Behaviour may communicate something, but its function still needs to be established. A person who hits when asked to participate in an activity may be communicating refusal, attempting to escape the demand, responding to sensory discomfort, reacting to a previous learning history, or experiencing several of these conditions simultaneously. The practitioner therefore needs to establish what happens when alternative communication is available and whether the environment responds consistently to lower-intensity forms of communication.

This is where trauma-responsive behavioural formulation differs from simply adding a trauma history to a behaviour support plan. The question is not only whether the person has experienced adversity, but whether the current environment provides conditions that support safety, predictability, communication and control. If a person can communicate refusal effectively and that refusal is respected where appropriate, there may be less behavioural value in escalation. If a person can request a break and reliably obtain one, self-injury may no longer be required to terminate an overwhelming demand. If transitions are predictable and the individual has meaningful choices within them, behaviour associated with uncertainty may change. These are behavioural hypotheses that can be observed and evaluated rather than assumptions that need to be accepted because a trauma history exists.

The person's experience of control is therefore another variable requiring explicit assessment. A history of adversity may be particularly relevant where current circumstances reproduce elements of previous experiences, such as unpredictability, lack of control, forced participation, physical restriction, or an inability to communicate refusal. Yet the presence of these similarities does not establish retraumatisation. The practitioner should instead consider whether the current environment is producing observable changes in behaviour, engagement, communication or distress and whether altering the relevant environmental conditions changes those outcomes. This maintains the empirical orientation of behavioural assessment while taking seriously the possibility that previous experiences influence how present circumstances are experienced.

Trauma-informed interpretation asks practitioners to remain alert to the possibility that a person's history may influence their responses and to avoid practices that unnecessarily reproduce threat, coercion or loss of control. Trauma-based attribution assumes that trauma is the reason for the behaviour. The former promotes curiosity and individualised formulation; the latter risks prematurely closing down assessment. A trauma-responsive behavioural approach requires the former.

This principle is especially important where a person cannot provide a conventional narrative of their experiences. The absence of verbal disclosure should not be treated as evidence that adversity did not occur, but neither should behaviour be used as retrospective proof that trauma must have occurred. McNally et al. (2021) highlight the complexity of identifying and responding to trauma among people with intellectual disabilities, including challenges associated with communication and recognition. The appropriate response is therefore to use multiple sources of information, including direct communication wherever possible, observation, accessible communication methods, information from people who know the individual well, medical and developmental history, environmental assessment, and careful consideration of changes in behaviour across contexts.

This approach also protects against another potential problem: interpreting all behaviour that appears disproportionate to the immediate situation as evidence of trauma. Behaviour can appear disproportionate because the practitioner does not have access to the variables that make it understandable. A demand may seem minor while carrying substantial response effort for the individual. A change that appears insignificant to staff may disrupt a highly valued routine. A seemingly ordinary interaction may involve communication demands that the person cannot easily manage. Physical discomfort may not be immediately apparent. Previous learning may also mean that a behaviour has acquired a function that is not obvious from the immediate situation. Functional assessment therefore remains essential precisely because the practitioner

cannot assume that the most apparent explanation is the correct one.

The formulation should consequently remain hypothesis-driven and revisable. Rather than recording that "the person becomes aggressive because of trauma", a more useful formulation might identify that aggression occurs disproportionately during particular interactions, that these interactions involve reduced choice or physical proximity, that the person has a documented history of experiences involving loss of control, and that aggression decreases when communication, predictability and choice are increased. The latter formulation does not prove that trauma caused the behaviour. It identifies observable relationships while recognising historical information that may be relevant to understanding them. It also provides clear variables that can be changed and evaluated.

This has implications for intervention. If trauma history is incorporated into formulation without changing the environment, trauma-informed language risks becoming descriptive rather than transformative. Conversely, if behavioural intervention focuses exclusively on changing the individual's response while leaving the environmental conditions unchanged, it may fail to address variables contributing to the behaviour. The purpose of integrating the two perspectives is therefore to identify interventions that can alter both the behavioural contingencies surrounding the presentation and the conditions through which the person experiences safety, predictability, communication and control.

Ultimately, the move from trauma history to behavioural formulation requires practitioners to hold two positions simultaneously. The person's history matters, but it does not predetermine the meaning of their behaviour. Behaviour remains something to be observed, measured and functionally assessed, while the individual's developmental, relational and service history provides essential context for interpreting what is observed. This approach avoids both extremes: reducing behaviour to a technical behavioural problem while ignoring experience, and reducing behaviour to a trauma response while overlooking function.

The result is a formulation that asks a broader set of questions: What is happening now? What function might the behaviour serve? What has happened before? What does the person understand about the current situation? What alternatives are available to them? How effectively do those alternatives change the environment? What aspects of the environment increase or decrease distress? What role might previous experiences play? And what can be changed without unnecessarily reducing the person's autonomy?

These questions establish the foundation for the next dimension of the framework: autonomy, agency and supported decision-making. If behaviour can be understood partly in terms of how effectively a person can influence their environment, then opportunities to exercise choice and participate in decisions are not simply ethical considerations. They may also be behaviourally significant components of the environment itself.

2.3 Autonomy, Agency and Supported Decision-Making

If behavioural formulation asks how a person's behaviour functions within an environment, then autonomy and agency require consideration of how effectively the person can influence that environment. This is particularly important when working with people who have intellectual, developmental, communication or cognitive disabilities, because support can easily become organised around what professionals, family members or carers believe is safest, most appropriate, or in the person's best interests. While decisions made on behalf of a person may sometimes be necessary to address immediate and significant risks, a pattern in which others routinely determine what a person does, where they go, who they interact with, or what support they receive can substantially reduce opportunities to practise choice and influence. Autonomy should therefore not be understood simply as the absence of professional control. It also involves the person's opportunity to express preferences, participate in decisions, exercise influence and experience the consequences of their own choices.

The difference is increasingly reflected in research examining the experiences of people with intellectual disabilities themselves. In a recent systematic review and synthesis of qualitative studies involving 246 adults with intellectual disabilities, Sheerin et al. (2026) found that participants frequently described situations in which decisions were made for them without their involvement and reported that their preferences were not always taken seriously. The review identified tensions between professional or family perceptions of what was

best for the person and the person's own understanding of autonomy and decision-making. These findings are important because they demonstrate that autonomy cannot be assessed solely by determining whether a person has been offered a formal choice. The relevant question is whether the person has a meaningful opportunity to influence what happens.

Supported decision-making involves providing the communication, information, time, assistance and relational support necessary for a person to express and exercise their own will and preferences, rather than assuming that difficulty communicating or making a decision transfers authority to someone else. This principle is reflected in Article 12 of the United Nations Convention on the Rights of Persons with Disabilities, which recognises the equal legal capacity of persons with disabilities and the right to access support in exercising that capacity (United Nations, 2006; Committee on the Rights of Persons with Disabilities, 2014).

For behavioural practice, this distinction has significance beyond questions of rights or ethics. Choice changes the behavioural environment. When a person is able to communicate a preference and that preference produces a meaningful environmental consequence, the person experiences a relationship between their behaviour and what happens next. Conversely, when communication, refusal or preference consistently produces little or no change in the environment, those responses may become less effective relative to other behaviours. This does not mean that challenging behaviour is necessarily caused by a lack of autonomy. Rather, it suggests that the availability and effectiveness of lower-intensity, socially acceptable forms of influence are relevant variables within behavioural formulation.

This proposition is consistent with evidence concerning self-determination among people with intellectual disabilities. Kuld et al. (2023), in a systematic review and meta-analysis encompassing 76 studies involving 631 people with severe or profound intellectual disabilities, identified interventions addressing choice-making, independence, problem-solving, meaningful activities and relationships, community participation, autonomy, supportive decision-making and self-advocacy. The review illustrates that self-determination can be supported through changes to environments, relationships, assistance and behavioural opportunities rather than being treated solely as an internal personal characteristic.

From this perspective, the behavioural importance of autonomy lies partly in opportunity. A person cannot practise decision-making if decisions are consistently made before they are involved. They cannot practise refusal if refusal is interpreted automatically as non-compliance. They cannot develop confidence in communicating preferences if those preferences rarely alter what happens. They cannot learn that requesting assistance is effective if requests are routinely ignored until distress escalates. In each case, the issue is not simply whether the person possesses a particular skill. It is whether the environment provides sufficient opportunities for that behaviour to occur and whether the behaviour produces meaningful consequences.

Consider a person who repeatedly becomes aggressive when presented with a particular activity. A conventional formulation might identify the activity as an antecedent and aggression as a behaviour that results in escape. That formulation may be accurate, but it does not necessarily establish why the person requires escalation to escape the activity. Further assessment might reveal that the individual has limited access to alternative forms of refusal, that previous requests for a break have not been consistently respected, or that staff interpret initial refusal as something to be overcome. In such circumstances, teaching a functional alternative response may be important, but so too is ensuring that the environment responds meaningfully when that alternative response occurs. Otherwise, the intervention may place responsibility for behavioural change entirely on the individual while leaving the contingency that made escalation effective largely unchanged.

This is where supported refusal becomes particularly important. Refusal is not inherently problematic behaviour. People without disabilities routinely decline activities, disagree with professionals, change their minds, request privacy, postpone appointments, reject unwanted interactions, or leave situations they find uncomfortable. For people receiving substantial support, however, these same behaviours may be interpreted through a clinical or behavioural lens. A person who refuses medication, personal care, an appointment or an activity may therefore be understood primarily as presenting a behavioural problem rather than as

communicating a preference that requires assessment and response. This does not mean that every refusal should be accepted without consideration of health, safety or legal responsibilities. It means that refusal should first be treated as potentially meaningful information rather than automatically as a behaviour to be suppressed.

The same principle applies to choice architecture. Offering two options is not necessarily equivalent to supporting autonomy. Choices may be technically available while the consequences of selecting them are effectively predetermined. A person may be allowed to choose between two activities but not whether to participate. They may choose when to complete a task but not whether the task is necessary. They may select between two meals but have no influence over where or with whom they eat. Meaningful autonomy therefore requires attention not only to the number of options available, but also to the significance of those options, the accessibility of the decision-making process, the person's ability to communicate a preference, and whether the environment respects that preference.

The recent TIBR/BRA publication provides a useful conceptual parallel here, although its empirical context is different. Gallagher et al. (2026) conceptualise behavioural opportunity as an environmental condition that makes behaviour possible and sufficiently safe to attempt, while arguing that repeated experiences of meaningful choice and respected decisions may create opportunities for agency and behavioural change. The relevance of this work to the present framework is conceptual rather than evidential: it provides a compatible theoretical proposition about how environments may be structured to increase behavioural opportunity, autonomy and access to reinforcement, but it does not provide empirical evidence concerning autistic people or people with intellectual and developmental disabilities. The present framework therefore draws on this work as a conceptual contribution while relying on the disability and behavioural literature for population-specific evidence.

This also changes how agency is conceptualised. Agency should not be treated as synonymous with independence. A person may require substantial assistance and nevertheless exercise considerable agency if support is responsive to their preferences and enables them to influence decisions. Conversely, a person with relatively strong cognitive or communication abilities may experience very limited agency if their environment is highly controlled and their choices carry little meaningful consequence. Dependence and autonomy are therefore not opposites. The relevant issue is how support is organised around dependence: whether assistance expands the person's ability to act and decide, or whether it progressively displaces their opportunities to do so.

Communication support should not be regarded simply as a mechanism for obtaining information from the person so that professionals can make better decisions. It can also be a means through which the person becomes the decision-maker. Augmentative and alternative communication, visual supports, accessible information, extended processing time, communication partners, structured opportunities for preference expression and repeated exposure to meaningful choices may all alter the person's behavioural opportunities. Where these supports increase the effectiveness of communication, they may also reduce the need for behaviour of greater intensity to achieve the same environmental outcome.

The implications extend to risk management. In environments where aggression or self-injury has occurred, there can be a strong tendency to narrow choice in the name of safety. Some restrictions may be necessary, proportionate and legally or clinically justified. However, if risk management progressively removes opportunities for decision-making, movement, privacy, relationships, preferred activities or community participation, the resulting environment may inadvertently reduce the very behavioural repertoires that practitioners are attempting to strengthen. The question should therefore not be whether risk can be eliminated through greater control, but how safety can be maintained while preserving the greatest feasible degree of autonomy and participation.

This requires a distinction between support and control. Support can involve prompting, modelling, adapting environments, providing information, offering choices, assisting communication and helping a person anticipate consequences. Control occurs when the supporter's preferences systematically replace the person's own opportunities to decide. The two may appear similar from the outside because both involve another person providing assistance. Their behavioural consequences, however, can be very different. Support can expand

behavioural options; excessive control can narrow them.

A trauma-responsive perspective adds another layer to this distinction. For individuals with histories of coercion, abuse, institutionalisation, restrictive practices or repeated experiences of having decisions made for them, the experience of being unable to influence what happens may be particularly significant. Again, this should not be assumed to explain a person's behaviour. Rather, it provides a reason to examine whether current practices unnecessarily reproduce conditions of powerlessness or unpredictability. Trauma-responsive practice emphasises empowerment, voice and choice precisely because these conditions can contribute to experiences of safety and trust (SAMHSA, 2014). When combined with functional behavioural assessment, this principle becomes operational: practitioners can examine whether increasing meaningful choice, communication and control changes observable patterns of distress, participation or behaviour.

The behavioural implications can be stated more directly. If a person has an effective way to say no, there may be less behavioural value in escalating to make a situation stop. If a person can request help and reliably receive it, there may be less need for distress to become the mechanism through which assistance is obtained. If a person can influence when, where and how an activity occurs, the motivational conditions surrounding participation may change. If a person's preferences are consistently respected, opportunities for communication and decision-making may become more reinforcing. These are hypotheses to be assessed rather than universal rules, but they provide testable directions for intervention.

This suggests that autonomy should become part of behavioural assessment rather than being considered only after functional analysis is complete. Practitioners might ask: What decisions does this person currently make? Which decisions are made for them? How does the person communicate preference or refusal? What happens when they say no? Which forms of communication reliably influence the environment? Are there situations in which their behaviour appears to be the only effective means of changing what happens? What choices are meaningful to them? What support is required to make those choices accessible? And what happens when the person's choices differ from those preferred by staff or carers?

Such questions move the formulation from *whether the person can make decisions* towards *what conditions allow the person to exercise decision-making*. This is a critical shift. A deficit-based formulation might conclude that an individual lacks capacity for choice because they require extensive support. An ecological formulation instead asks whether the environment has provided the communication, time, assistance and opportunities necessary for the person to demonstrate preference and influence.

The emerging evidence concerning autonomy among people with intellectual disabilities strengthens this importance. Sheerin et al. (2026) found that people with intellectual disabilities frequently described autonomy as being constrained when family members or staff assumed they knew what was best or failed to incorporate expressed preferences into subsequent decisions. Kuld et al. (2023) similarly demonstrate that self-determination can be targeted through interventions addressing choice, independence, problem-solving, supportive decision-making, self-advocacy and changes to environmental and relational conditions. These findings support a view of autonomy as something that can be facilitated or constrained by the behavioural environment rather than simply possessed or absent within the individual.

The present framework therefore proposes that agency is both an ethical objective and a behavioural variable. It is ethical because people should have meaningful opportunities to influence decisions about their own lives. It is behavioural because opportunities to choose, communicate, refuse, negotiate, initiate and experience the consequences of action create conditions in which behavioural repertoires can develop and become more effective. This does not mean that increasing choice will eliminate aggression or self-injury. It means that where limited behavioural influence is part of the person's current environment, increasing meaningful agency may constitute a relevant component of behavioural intervention.

The concept also connects directly with the broader argument concerning service history. If an individual has spent years in environments where professionals and carers make decisions on their behalf, where refusal is routinely overridden, or where behaviour is primarily used to manage risk rather than communicate preference, those experiences may form part of the person's behavioural history.

Conversely, repeated experiences in which communication is heard, refusal is respected where possible, choices have meaningful consequences and support expands rather than constrains participation may establish a different behavioural environment. Over time, these repeated contingencies may influence not only what the person does, but what they expect their behaviour to accomplish.

The resulting principle is therefore not “*give the person more choices*”. It is more precise: design the environment so that the person's behaviour can meaningfully influence what happens to them, within appropriate boundaries of safety, rights and shared responsibility. This is a more demanding proposition because it requires services to examine their own behaviour as well as the behaviour of the person they support.

It also provides an important bridge to the next subsection. If a person's service history can shape expectations about whether communication, refusal and choice will influence the environment, then the history of the service relationship itself becomes behaviourally relevant. The question is no longer simply what happened to the person before they entered the current service, but what has repeatedly happened *between the person and services* over time.

2.4 The Service History as Behavioural History

For the purposes of this paper, service history refers to the cumulative pattern of a person's interactions with health, education, disability, mental-health, social-care, behavioural, day-service and residential systems over time, including the relationships, interventions, restrictions, transitions, expectations and opportunities for communication and choice that have characterised those interactions. It is therefore more than a record of service use or clinical intervention. It encompasses the behavioural and relational experiences that may accumulate through repeated contact with support systems and become relevant to how subsequent environments and interactions are experienced.

Service history may include not only what services have provided, but what the person has repeatedly experienced when they communicate, refuse, seek assistance, become distressed or behave in ways that others find difficult. Over time, such interactions may influence expectations about whether communication will be effective, whether refusal will be respected, and what consequences may follow escalation. This does not mean that previous service experiences cause subsequent behaviour. Rather, they may form part of the learning history through which current contingencies acquire behavioural significance.

For individuals with extensive service involvement, service history may therefore represent a substantial component of the learning environment in which behavioural repertoires develop and change. A person may have learned that asking for help produces assistance, that particular forms of communication are ineffective, that refusal results in negotiation, or that escalation produces removal from a demand or increased professional attention. These possibilities cannot be inferred from behaviour alone and must be established through individual assessment. Their significance lies in recognising that the consequences of previous interactions may become relevant to how current contingencies operate.

This is the point at which the paper moves from established behavioural principles to its specific conceptual contribution. Established functional approaches already recognise environmental conditions, previous learning, behavioural repertoires, and the role of services, staff and carers in developing or maintaining behaviour (NICE, 2015). Research has also identified relationships between organisational characteristics, support quality and challenging behaviour

(Olivier-Pijpers et al., 2019). These sources support the relevance of service and organisational variables; they do not, however, directly establish the full temporal pathway proposed here. The contribution of the present framework is therefore to hypothesise that repeated service interactions may become part of the learning history through which subsequent service environments acquire behavioural significance.

Behavioural histories are also reciprocal. Staff and organisations develop expectations from previous incidents, while their responses alter the contingencies available to the person. Ravoux et al. (2012) demonstrated that

staff responses to adults who challenge services are influenced by service context and previous experiences of managing challenging behaviour. Over time, this can produce interactional patterns in which each party's behaviour influences the future behaviour of the other. A person may escalate during a demand, staff may withdraw it because of immediate risk, and both may subsequently encounter similar situations with altered expectations. Staff may anticipate escalation and restrict opportunities for refusal, while the person may increasingly rely on escalation because lower-intensity communication has become less effective. Such patterns need not reflect individual intent; they can emerge through repeated, understandable responses within complex organisational environments.

Understanding these patterns also requires attention to the organisation itself. Staff operate within staffing constraints, policies, risk-management requirements, professional responsibilities and previous experiences, and implementation of behaviour support can be affected by organisational pressures and difficulties maintaining fidelity (Brady et al., 2025). Trauma-responsive practice similarly requires organisational conditions that enable staff to recognise and respond appropriately to trauma rather than placing the burden of interpretation solely on individual practitioners (McNally et al., 2022).

Service histories may also be fragmented. People can move between schools, hospitals, residential placements, respite, day programmes, community services, behavioural teams and mental-health services, with each service holding only part of their history. Important information about communication, preferences, previous interventions, restrictive practices, relationships and successful strategies may not transfer consistently. Recent work on trauma-informed positive behaviour support identifies fragmented referral systems, limited information sharing and diagnostic overshadowing as barriers to recognising historical trauma and its possible relationship with current behaviour (Leif et al., 2026). A new service may consequently encounter aggression or self-injury without the history that gives it context, increasing the risk that behaviour is interpreted as a stable characteristic of the individual.

Documentation can reinforce this process. Descriptions such as *aggressive*, *non-compliant*, *difficult* or *uncooperative* may become portable characteristics that influence future expectations, staffing, risk assessments and the degree of autonomy afforded to the person. This does not mean such descriptions are necessarily inaccurate. Rather, behavioural descriptions can acquire functions beyond documentation when they shape how subsequent interactions are organised. Conversely, positive histories of effective communication, predictable support, successful coping, trust and genuine choice may also influence future behaviour. Trauma-responsive practice should therefore attend not only to adversity and restriction, but to the experiences through which competence, agency and alternative repertoires have been strengthened.

This raises a broader question about behavioural opportunity: what behaviours is the service environment actually giving the person opportunities to practise? Structure, routine and support can be protective and enabling, particularly for autistic people and people with intellectual or developmental disabilities. The issue is not whether structure exists, but who controls it, how flexible it is, and whether the person has meaningful influence within it. A predictable routine can support autonomy when it enables choice and participation; the same routine can become restrictive when predictability is achieved primarily through inflexibility and limited negotiation.

In addition to examining immediate antecedents, consequences and staff responses, practitioners can consider the longer pattern: Had communication been effective? Had refusals been respected? Had staffing or routines changed? Had restrictions increased? Had opportunities for preferred activities or meaningful choice decreased? What had staff learned to expect, and what might the person have learned to expect from staff? These questions do not replace incident analysis; they expand it.

The service history should therefore be understood as one layer of behavioural history, not as a replacement for individual functional assessment. It may include what the person has experienced, what they have learned, how staff have responded, which forms of communication have been reinforced, and which behaviours have produced meaningful environmental change. The central proposition is that behavioural history is not simply the history of the person's behaviour, but the history of the person's behaviour in interaction with the environments and people around them.

For individuals with extensive service involvement, these clarifications may be crucial. A person who has displayed aggression for ten years may not have experienced the same behavioural environment for ten years. Topography may remain similar while function, context and consequences change. Service history should therefore be treated as formulation data rather than background information: relevant historical patterns should inform hypotheses about current contingencies, but their significance must be tested against current behaviour and environmental conditions.

The ethical safeguard is equally important. Historical formulation should not become another fixed identity. Describing someone as a person shaped by trauma, restriction or service failure can be as reductive as describing them as aggressive or challenging if it obscures current capacities, preferences and potential for change. The purpose of history is to expand possible explanations and intervention targets, not create a more sophisticated label.

The central proposition can therefore be stated more precisely: when service involvement is extensive and behaviourally consequential, service history may form part of behavioural history, such that repeated service contingencies may influence expectations about subsequent service interactions. The current environment may then reproduce, interrupt or reshape those contingencies. This remains a hypothesis, not an established causal pathway. The empirical task is to determine whether identifiable features of service history predict subsequent responding, whether current service cues interact with that history, and whether changing relevant contingencies changes behaviour or behavioural repertoire.

This leads directly to the next section: if the service becomes part of the person's behavioural history, what happens when the system itself develops patterns that unintentionally maintain the behaviour it is attempting to reduce?

THE SERVICE SYSTEM AS A BEHAVIOURAL ENVIRONMENT

3.1 The Service as an Environmental Context

Behavioural assessment directs attention towards the relationship between an individual's behaviour and the environmental conditions in which that behaviour occurs. Antecedents, consequences, reinforcement histories, response effort, communication, and environmental demands are considered in an attempt to understand why behaviour occurs and what may maintain it. This approach is particularly important when working with aggression, self-injury, property destruction, avoidance, or other behaviours that may present significant risks to the individual or those around them. However, when an individual has experienced sustained involvement with health, education, disability, behavioural, mental-health, or social-care services, the relevant environment may be considerably broader than the immediate setting in which a behaviour is observed. The service system itself can become part of the person's behavioural environment, with repeated interactions contributing to expectations, learned responses, relationships, and patterns of engagement over time.

This proposition does not suggest that services cause challenging behaviour, nor does it imply that every difficult service experience constitutes trauma. Rather, it recognises that behaviour is shaped by learning histories and that those histories include interactions with other people and environments. NICE guidance explicitly recommends considering current and past personal and environmental factors when assessing behaviour that challenges, including care and educational settings, previous interventions, the person's social and interpersonal history, life history, sensory needs, the care environment, and the role of services, staff, family members and carers in developing or maintaining behaviour (NICE, 2015). Functional assessment is likewise expected to examine the situations in which behaviour does and does not occur across the person's usual routines and environments, rather than treating the behaviour as independent of context (NICE, 2015).

For an individual who has spent years moving between professionals, assessments, educational settings, residential placements, therapeutic programmes, hospitals, or community services, each interaction may therefore occur against the background of previous experience. An appointment is not necessarily an isolated event. A request to participate may carry meaning derived from previous demands. A professional asking questions may encounter a person whose previous experiences have involved repeatedly explaining themselves

without feeling understood. A change in routine may occur within a history of numerous transitions. Similarly, a new intervention may be encountered not as a neutral opportunity, but through expectations shaped by interventions that were previously ineffective, intrusive, restrictive, or experienced as outside the person's control.

The relevance of this broader environmental perspective is already recognised within guidance concerning people with intellectual disabilities and behaviour that challenges. NICE (2015) identifies communication difficulties, environmental conditions, low engagement, lack of choice, changes in staffing or placement, and other contextual factors as relevant to the assessment of behaviour that challenges. Research examining organisational environments has additionally identified relationships between organisational characteristics, support practices and challenging behaviour (Olivier-Pijpers et al., 2019). The same guidance recommends interventions that modify environmental factors, address staff and carer responses, increase meaningful engagement, improve communication, and develop alternative behaviours that achieve the same function (NICE, 2015). The service environment is therefore not simply the setting in which behavioural intervention is delivered. It is one of the environments within which behaviour occurs and may be modified.

This may become particularly important for people whose daily lives are substantially organised around services. For some individuals, school, day services, residential settings, supported employment, clinical appointments, respite services, or community programmes may account for a substantial proportion of their social and behavioural experience. In such circumstances, staffing patterns, routines, communication practices, available activities, opportunities for choice, sensory conditions, transitions, and responses to distress are not peripheral considerations. They form part of the environment in which behaviour is repeatedly evoked and reinforced. A service may therefore function simultaneously as a support system, a social environment, a learning environment, and a behavioural environment.

The implications are especially relevant where behaviour varies across settings. If aggression occurs frequently in one service but rarely in another, or if self-injury is associated with particular staff, activities, routines, transitions or forms of communication, those differences become important behavioural information. NICE recommends identifying the events, times and situations in which behaviour occurs and does not occur across the person's usual environments precisely because such variation can inform functional hypotheses (NICE, 2015). The question is therefore not only *what is different about the person when the behaviour occurs?* but also *what is different about the environment in which the behaviour occurs?*

This is an important safeguard against locating behavioural difficulty exclusively within the individual. It also aligns with emerging trauma-responsive positive behaviour support approaches that conceptualise challenging behaviour within interacting personal, interpersonal, organisational and wider social environments rather than at the level of the individual alone (Leif et al., 2026). The present framework extends this ecological perspective by giving particular attention to the history of interaction between the person and the service system, and to the possibility that repeated service experiences may shape how future service environments are encountered.

3.2 Organisational Contingencies and Reciprocal Behaviour

Understanding the service as an environmental context also requires attention to the behaviour of professionals and organisations themselves. Practitioners do not operate outside the contingencies they create. Appointment structures, referral processes, communication practices, waiting times, staffing changes, documentation requirements, risk procedures, discharge processes, organisational policies, and resource constraints all influence what individuals experience and the behavioural options available to them. NICE therefore recommends that assessment consider not only personal factors but also the role of services, staff, family members and carers in developing or maintaining behaviour, and that behaviour support interventions address environmental factors and staff or carer responses where these contribute to behavioural patterns (NICE, 2015).

This creates the possibility of what might be described as reciprocal behavioural shaping. The person's behaviour influences how staff respond, while staff responses influence the consequences experienced by the

person and therefore potentially influence subsequent behaviour. An individual may escalate during a demand; staff may remove the demand because of immediate risk; the person subsequently encounters a similar demand and escalates again; staff begin to anticipate escalation and modify the demand earlier. Over time, a pattern can develop in which both parties behave differently because of what has occurred during previous interactions. The resulting behavioural system may be understandable to everyone involved while nevertheless maintaining patterns that neither the person nor the service ultimately wants.

This does not mean that staff are responsible for challenging behaviour. Behavioural systems are more complex than a simple cause-and-effect relationship, and professionals operate within their own organisational contingencies, including safeguarding responsibilities, staffing limitations, policy requirements, risk-management procedures and previous experiences. Nevertheless, these factors are behaviourally relevant. The organisation's responses can alter the person's environment, while the person's responses can alter the behaviour of staff and the organisation. The service relationship can therefore become a reciprocal system in which each participant's behaviour forms part of the context for the other's subsequent behaviour.

This perspective is particularly important following incidents of aggression or self-injury. Removal from an activity, increased observation, changes in staffing, restrictions on movement, altered access to preferred activities, repeated professional contact, or increased demands may all follow an incident. Some of these responses may be necessary to manage immediate risk. Others may inadvertently create new contingencies. Functional assessment is therefore necessary to examine whether particular consequences contribute to the continuation of behaviour, while trauma-responsive practice adds consideration of whether repeated responses are also affecting experiences of safety, predictability, control or trust (NICE, 2015; SAMHSA, 2014).

A person who repeatedly experiences distress followed by loss of control may subsequently approach similar circumstances differently. A person whose attempts to communicate have repeatedly been unsuccessful may increasingly rely on behaviour that produces an immediate response. A person who has experienced numerous changes in professionals or placements may approach new relationships cautiously. These are hypotheses rather than conclusions about any particular individual. Their importance lies in demonstrating that the consequences of service responses may extend beyond the immediate episode and may influence subsequent interactions.

The organisation may also respond to its own behavioural history. Following repeated incidents, staff may become increasingly vigilant, appointments may become more tightly controlled, activities may be restricted, or additional safeguards may be introduced. Such responses can be understandable and sometimes necessary. However, if the result is an increasingly restrictive environment, the service may inadvertently reduce opportunities for communication, choice, participation and successful engagement. NICE specifically recommends least-restrictive approaches, environmental modification, development of alternative behaviours, and regular review of behaviour support plans and restrictive interventions (NICE, 2015). The objective is therefore not simply to prevent future incidents, but to alter the conditions that contribute to them while maintaining safety.

The resulting formulation is more complex than a simple antecedent–behaviour–consequence sequence. It includes the possibility that person and service are each part of the other's behavioural environment. This is consistent with the social-ecological approach proposed by Leif et al. (2026), which identifies organisational factors alongside personal and interpersonal factors as relevant to trauma-informed positive behaviour support for people with intellectual and developmental disabilities.

The implication is important for intervention. If a behavioural pattern is partly maintained through an interaction between the person's behaviour and the service's response, changing only the person's behaviour may be insufficient. Intervention may also need to alter how staff present demands, respond to refusal, provide communication opportunities, manage transitions, reinforce alternative responses, and respond to early indicators of distress. NICE guidance explicitly recommends addressing staff and family member/carer responses as part of personalised behavioural interventions (NICE, 2015). The service is therefore not merely implementing the intervention; the behaviour of the service may itself be one of the intervention variables.

3.3 Cumulative Service Experience and Behavioural Expectations

The effects of service involvement may accumulate across time. A single appointment, staff change or unsuccessful interaction may have limited behavioural significance, but repeated experiences can contribute to expectations about whether professionals are trustworthy, communication will be understood, refusal will be respected, and support will increase or reduce personal control. This does not require previous experiences to have been traumatic, nor does it establish them as causes of current behaviour. Rather, repeated interactions may become part of behavioural history, such that a current appointment or intervention acquires significance through its relationship to previous experiences.

This temporal perspective is consistent with NICE's view of functional assessment as an ongoing process, recognising that factors triggering or maintaining behaviour may change over time and recommending reassessment following significant changes in behaviour or circumstances (NICE, 2015). History can therefore inform hypotheses without becoming a retrospective causal explanation; current behavioural patterns and environmental changes remain essential to testing those hypotheses.

The concept of behavioural opportunity extends this argument. The recent TIBR/BRA framework proposes that environments create opportunities for particular behaviours to be attempted, practised and reinforced. Although developed in a different population and context and not empirical evidence for autistic people or people with intellectual disabilities, its underlying behavioural proposition is relevant: environments do not simply respond to behavioural repertoires; they create opportunities for some repertoires to develop while constraining others.

Applied to services, this raises the question: what behaviours does the environment give the person opportunities to practise? Where daily interactions primarily involve following instructions, waiting, transitioning, responding to prompts and completing predetermined activities, opportunities to initiate, negotiate, disagree, problem-solve, self-advocate and make decisions may be comparatively limited. Conversely, repeated opportunities for communication, choice, contribution and supported decision-making may strengthen behaviours that enable participation and influence.

This does not mean removing structure or routine. Predictability can be highly supportive, particularly for autistic people and people with developmental or communication differences. The relevant question is how structure is organised and how much influence the person has within it. A predictable environment can support autonomy when it enables anticipation and meaningful choice; it can become restrictive when predictability depends on inflexible routines that leave little room for preference, negotiation or refusal. This tension may be particularly significant during adolescence and transition into adulthood, when expectations for increasing independence can coincide with increasing dependence on services. NICE identifies transitions, changes in environment and staffing, communication difficulties and developmental factors as relevant to behaviour that challenges (NICE, 2015).

Where lower-intensity behaviours provide few effective means of influencing the environment, more intense behaviour may become relatively more effective. This is not a claim that aggression or self-injury is consciously selected, but a behavioural proposition concerning the relative effectiveness of available responses. Professional expectations may also influence these contingencies. Descriptions such as *aggressive*, *non-compliant* or *difficult to engage* can shape how future interactions are structured, potentially affecting staff expectations, risk management and opportunities for autonomy. The issue is not that labels directly cause behaviour, but that they can influence the environmental conditions in which behaviour occurs.

Service history therefore includes more than incidents. It may contain histories of successful or unsuccessful communication, respected or overridden refusal, meaningful or restricted choice, stable or disrupted relationships, participation, exclusion, reinforcement and trust. These histories become relevant when they help explain observable patterns in the person's current relationship with services.

A proportionate approach is essential. Reconstructing every event would be impractical and potentially intrusive. Service history warrants greater consideration where behaviour is persistent, severe, context-

dependent, resistant to intervention, or associated with extensive or changing service involvement. Consistent with NICE's phased approach, the depth of assessment should be proportionate to the complexity and severity of the presentation and draw on records, interviews and direct observation where required (NICE, 2015).

The central question is therefore not whether a person has experienced a difficult service history, but whether that history helps explain something observable about their current behavioural relationship with services. Where it does, it becomes relevant formulation data.

Table 4. Expanding Behavioural Formulation: From Individual Presentation to Behavioural Context

Conventional behavioural formulation	Trauma-responsive behavioural ecology
Immediate antecedents — Focuses primarily on events immediately preceding behaviour.	Immediate and cumulative context — Considers immediate antecedents alongside developmental history, service history and repeated environmental contingencies.
Observable behaviour — Focuses on what the person does and how often, intensely or for how long.	Behaviour, communication and context — Considers behaviour alongside communication, health, relationships, environmental conditions and what the behaviour may accomplish within that context.
Individual behaviour — Locates the primary unit of analysis within the person.	Person–environment relationship — Examines the reciprocal relationship between the person's behaviour and the environment in which it occurs.
Current setting — Gives primary attention to the environment immediately surrounding the behaviour.	Current setting and service history — Considers how previous experiences with services, staff, routines and interventions may shape expectations and behavioural responding.
Behavioural function — Identifies the consequences that may maintain behaviour.	Function within behavioural ecology — Maintains functional analysis while considering how reinforcement, communication, relationships, expectations and environmental opportunities interact over time.
Staff response — Staff responses are considered primarily as consequences of behaviour.	Reciprocal interaction — Staff behaviour is understood as both a consequence of behaviour and a variable that can shape subsequent behaviour.
Compliance — Success may be implicitly associated with following requests or completing activities.	Communication, refusal and negotiation — Refusal and disagreement are treated as potentially meaningful forms of communication, with opportunities for negotiation and supported decision-making considered.
Behaviour reduction — Reduction in frequency, intensity or duration may be treated as the primary indicator of improvement.	Improvement includes reduced harmful behaviour alongside increased communication, choice, participation, autonomy and access to meaningful reinforcement.
Individual intervention — Intervention is primarily directed towards changing the person's behaviour.	Individual and environmental intervention — Intervention targets the person, relationships, environmental contingencies and organisational conditions where assessment identifies them as relevant.
Crisis response — Emphasis may fall on managing immediate risk and preventing recurrence.	Crisis response and organisational learning — Incidents are used to examine immediate risk while also identifying modifiable environmental, relational and organisational variables.
Service as delivery setting — The service is treated primarily as the place where intervention occurs.	Service as behavioural environment and intervention target — The service itself is examined as part of the behavioural context and, where appropriate, as a target for change.
Success = behaviour changes — The primary question is whether the target behaviour has decreased.	Success = what becomes possible — The question extends to what the person can now communicate, choose, participate in, access and do instead.

Note. *The right-hand column represents the conceptual synthesis proposed in this paper. It does not imply that conventional behavioural assessment excludes environmental variables, communication, learning history or quality-of-life outcomes. Rather, the proposed framework extends the scope and temporal reach of behavioural formulation by explicitly integrating service history, autonomy, organisational context and reciprocal person–environment processes.*

3.4 From Individual Formulation to Systemic Formulation

Understanding the service as part of the behavioural environment requires a careful distinction between expanding the unit of analysis and claiming a new causal mechanism. The individual remains the focus of support, and functional assessment remains necessary. Figure 1 therefore separates the established behavioural foundation—person, immediate antecedents and consequences, learning history and environmental variables—from the proposed temporal extension concerning cumulative service experience and behavioural expectations. The figure is intended as a conceptual model: the solid pathway represents established components of behavioural formulation, while the extended temporal pathway identifies relationships proposed for empirical testing.

This is consistent with established behavioural guidance. NICE recommends that interventions for behaviour that challenges be personalised, function-based and tailored across the settings in which the person spends time, while also requiring modification of environmental factors and attention to staff and family responses (NICE, 2015). It also recommends that support should focus on improving the person's support and increasing their skills rather than simply changing the person. The proposed framework therefore represents an extension of principles already present within good behavioural practice rather than a rejection of functional assessment.

The systemic formulation asks several additional questions. What is the person experiencing? What does the behaviour accomplish? What environmental conditions make the behaviour more or less likely? What alternatives are available? How effectively do those alternatives influence the environment? What has the person repeatedly learned about communicating with services? How do staff and organisational responses influence subsequent behaviour? And which aspects of the environment can be changed without compromising necessary safety?

These questions also help distinguish environmental modification from environmental blame. Identifying a service variable does not mean assigning fault to an individual professional or organisation. A rigid appointment structure may reflect wider administrative constraints. Limited staffing may reflect funding decisions. Restrictive practices may emerge from genuine concerns about immediate risk. Communication difficulties may arise from inadequate resources rather than lack of commitment. A systemic formulation therefore seeks to identify modifiable variables rather than allocate responsibility retrospectively.

The same principle applies to trauma. A service may unintentionally reproduce experiences of powerlessness or unpredictability without those practices being equivalent to the original source of trauma. Trauma-responsive practice therefore requires attention to the person's experience without assuming that current behaviour is necessarily trauma-driven. The social-ecological trauma/PBS literature similarly argues for consideration of protective and risk factors across personal, interpersonal, organisational and societal levels (Leif et al., 2026).

The resulting formulation is consequently both behavioural and ecological. Behaviour remains observable and measurable. Functional hypotheses remain necessary. Consequences remain important. Alternative behavioural repertoires still need to be taught and reinforced. At the same time, the environments in which those behaviours occur become legitimate targets for assessment and intervention.

This is also where the concept of autonomy becomes operational rather than merely aspirational. A service can ask not only whether aggression or self-injury has decreased, but whether the person has gained more effective ways to communicate, refuse, request assistance, make decisions and participate. NICE already recommends that interventions aim to improve quality of life, support independence and self-management, involve people in decisions, and increase skills rather than focusing solely on changing the person (NICE, 2015). Research on

self-determination similarly indicates that choice, independence, decision-making and related opportunities can be actively supported for people with severe or profound intellectual disabilities (Kuld et al., 2023).

The service therefore becomes both context and potential intervention target. Changing the person's behavioural repertoire may be necessary. Changing the environment in which that repertoire is expected to operate may be equally important. The purpose is not to eliminate professional structure, but to ensure that structure supports rather than unnecessarily constrains communication, autonomy, participation and safety.

This provides the conceptual foundation for the next section. If the service environment can contribute to the conditions in which behaviour develops and is maintained, then there are circumstances in which repeated descriptions of a person as presenting with *behaviour that challenges* may tell us as much about the environment's capacity to accommodate communication, autonomy, sensory needs, relationships and distress as they tell us about the individual.

The question that follows is therefore more challenging: What happens when “behaviour that challenges” becomes, in effect, a diagnosis of the environment?

Note: Figure 1 distinguishes established components of functional behavioural formulation from the proposed temporal extension. The temporal pathway from repeated service interactions to subsequent behavioural expectations and responding is a hypothesis generated by the present framework, not an established causal finding.

WHEN “BEHAVIOUR THAT CHALLENGES” BECOMES THE DIAGNOSIS OF THE ENVIRONMENT

4.1 The Problem of Behavioural Labels

The language used to describe behaviour is not neutral. Terms such as *behaviour that challenges*, *non-compliance*, *refusal*, *resistance*, and *difficult to engage* can provide useful shorthand for communicating risk or describing observable patterns, but they can also influence how a person is subsequently understood. Once a behavioural presentation becomes the defining feature of a referral, assessment, or case formulation, there is a risk that attention becomes increasingly directed towards changing the individual while the conditions surrounding the behaviour remain comparatively unexamined. This is particularly important when a person has complex communication, cognitive, developmental, sensory, or mental-health needs, because behaviours that appear disruptive may represent the observable outcome of interactions between individual characteristics and environmental conditions. NICE guidance explicitly recognises that behaviour that challenges may be influenced by interactions between personal and environmental factors and recommends consideration of physical and social environments, communication, relationships, routines, previous interventions, and the role of staff and carers in developing or maintaining behaviour (NICE, 2015).

The distinction between describing behaviour and explaining behaviour is therefore critical. Behaviour can be observed and measured, but its function requires assessment. An individual may refuse to enter a particular room, for example, but the refusal itself does not establish whether the person is attempting to escape an overwhelming sensory environment, avoid an unfamiliar demand, communicate disagreement, maintain predictability, respond to a previous negative experience, or achieve another outcome. Similarly, aggression may function to terminate an interaction, obtain access to something important, communicate distress, respond to perceived threat, or alter an environment that has become intolerable. Self-injury may likewise be associated with sensory, communicative, emotional, biological, or environmental variables. The same topography may therefore serve different functions for different people, and its function may change across contexts and over time. Functional assessment remains essential precisely because observable form does not establish behavioural function (NICE, 2015).

The language attached to behaviour can nevertheless become more than description. Once a person is repeatedly characterised as *aggressive*, *resistant*, *non-compliant*, or *difficult to engage*, these descriptions may

become part of the professional narrative through which subsequent practitioners encounter them. The person may enter a new service already carrying a behavioural reputation. Future professionals may consequently anticipate difficulty, approach interactions more cautiously, introduce additional structure or restrictions, or interpret ambiguous behaviour through an established expectation of risk. Such responses may be understandable, particularly where previous incidents have involved significant risk, but they can also influence the environment in which subsequent behaviour occurs.

Research involving autistic adults accessing mental-health services illustrates the importance of this issue from the service user's perspective. Brede et al. (2022) identified barriers including difficulties with service fit, communication, understanding of autism, and therapeutic relationships, while highlighting the importance of adaptable services, trust, listening and empowerment. These findings do not demonstrate that poor service fit causes challenging behaviour. They do, however, reinforce the importance of examining the interaction between the person and the service rather than assuming that difficulty engaging is solely a characteristic of the person.

The concern is therefore not that behavioural terminology should be abandoned. Clear descriptions of observable behaviour remain essential for assessment, communication and risk management. The concern is that a descriptive label can become an explanatory conclusion. When *refusal* becomes evidence that someone is resistant, *withdrawal* becomes evidence that they are disengaged, or *aggression* becomes evidence that they are inherently difficult to support, the formulation may close before the relevant environmental variables have been adequately investigated.

4.2 When Behaviour Reduction Becomes the Outcome

The problem becomes more significant when reduction in observable behaviour becomes the primary indicator of whether an intervention has succeeded. Behaviour reduction can be an important and necessary outcome. A reduction in severe aggression or self-injury may represent a substantial improvement in safety and quality of life. However, the disappearance of an observable behaviour does not, by itself, establish that the underlying conditions have improved.

A person may stop refusing because the environment has become more restrictive. They may no longer attempt to leave because opportunities for movement have been reduced. They may stop communicating disagreement because previous attempts have consistently failed to influence what happens. They may become quieter because demands have been removed, because engagement opportunities have narrowed, or because they have learned that protest is ineffective. Conversely, an individual may continue to express disagreement, decline an activity, request changes, or attempt to leave an interaction while simultaneously experiencing improved autonomy and communication. Behavioural frequency therefore needs to be interpreted alongside the conditions under which behaviour occurs and the outcomes experienced by the person.

This is already reflected in NICE guidance, which recommends that behavioural interventions be linked to quality-of-life outcomes rather than focusing solely on the reduction of target behaviour. For people with learning disabilities, assessment should consider quality of life alongside behavioural frequency and intensity, while interventions should be personalised, function-based, tailored across settings, and directed towards modifying environmental factors where these contribute to behaviour (NICE, 2015). For autistic adults, NICE similarly recommends that psychosocial interventions have clearly identified behavioural targets while also focusing on outcomes linked to quality of life and modification of environmental factors that may initiate or maintain behaviour (NICE, 2015).

A reduction in self-injury is clearly desirable where the behaviour causes injury or significant risk. Yet a behavioural intervention that suppresses self-injury without establishing what the behaviour was accomplishing may leave the underlying need unresolved. If self-injury was associated with escape from an overwhelming demand, communication of distress, access to assistance, or regulation of an aversive sensory experience, simply preventing the behaviour does not necessarily address the variable that occasioned it. Functional assessment is therefore necessary not only to determine how behaviour can be reduced, but to identify what alternative behavioural repertoire might allow the same relevant outcome to be achieved more

safely (NICE, 2015).

The same principle applies to aggression. Reducing aggression is not equivalent to eliminating the conditions that make aggression more likely. If aggression occurs primarily during particular forms of interaction, under particular demands, or within particular environments, then successful intervention should ideally involve changes to those conditions alongside development of alternative responses. NICE specifically recommends modification of environmental factors that may trigger or maintain behaviour and attention to staff and carer responses as components of behavioural intervention (NICE, 2015).

This suggests a broader distinction between behavioural suppression and behavioural change. Suppression refers to a reduction in observable behaviour, which may be necessary and clinically valuable. Behavioural change, as conceptualised within the present framework, involves a change in the relationship between the person and their environment: the person has more effective ways to communicate, participate, refuse, request assistance, regulate demands, or influence what happens to them, while the environment has become more responsive to those behaviours.

A service may report fewer incidents while the person's opportunities for choice have simultaneously decreased. Conversely, a person may initially display more verbal or behavioural protest after being given meaningful opportunities to express preferences because the environment has become more responsive to communication. An increase in observable disagreement should not automatically be interpreted as deterioration. Its meaning depends upon what the behaviour represents and what follows it.

The implication is not that behaviour reduction should be abandoned. It is that behaviour reduction should be situated within a broader outcome framework. Safety remains essential, but so too are communication, participation, autonomy, relationships, quality of life, and the development of safer behavioural alternatives.

4.3 Compliance, Refusal and the Meaning of Behaviour

Compliance is often treated implicitly as evidence that an intervention is working: the person attends, participates, follows instructions, accepts support, or no longer refuses. Yet compliance is not synonymous with wellbeing, autonomy, engagement, or psychological safety.

For people who require substantial support, refusal may be one of the few available ways of communicating disagreement. A person may refuse medication, personal care, an activity, an appointment, physical contact, a transition, or a particular professional interaction. Such refusal may sometimes reflect avoidance, distress, pain, sensory discomfort, misunderstanding, or an established behavioural contingency. It may also represent a genuine preference. The behaviour itself does not determine which interpretation is correct.

This is particularly important because people with intellectual, developmental, cognitive, or communication disabilities may require support to express preferences in ways that services readily recognise. The absence of conventional verbal communication should not be interpreted as the absence of preference. Equally, behaviour should not automatically be treated as a transparent communication system in which practitioners simply infer what the person means. The appropriate response is to investigate the function of the behaviour while improving the person's access to more effective means of communication and decision-making.

The difference between supporting a person to participate in a decision and making the decision for them is therefore central. A person may require accessible information, visual supports, additional processing time, communication assistance, repeated explanation, or support from someone who understands their communication. These forms of assistance can expand rather than diminish agency. The relevant question is not whether the person can make a decision without assistance, but whether the environment has provided the support necessary for their preferences and will to be expressed and considered.

This is consistent with the broader literature on autonomy among people with intellectual disabilities. Sheerin et al. (2026), in a systematic review and synthesis of qualitative studies involving 246 adults with intellectual disabilities, found that participants described situations in which decisions were made for them, their

preferences were not adequately incorporated, and professionals or family members assumed they knew what was best. These findings reinforce the importance of distinguishing between *being supported in decision-making* and *having decisions made on one's behalf*.

From a behavioural perspective, this distinction has additional significance because the effectiveness of communication is partly determined by its consequences. If a person can communicate “no” and that communication is consistently recognised and responded to appropriately, refusal becomes an effective behavioural option. If “no” is routinely ignored until behaviour escalates, more intense behaviour may become comparatively more effective. The issue is not that the person has consciously chosen escalation, but that the environment may have established a differential relationship between low-intensity and high-intensity forms of communication.

The practical question is therefore not simply whether the person displays refusal. It is what happens when they refuse. If refusal leads to discussion, adaptation, additional information, a reasonable alternative, or an agreed opportunity to pause, the behavioural environment differs substantially from one in which refusal is interpreted automatically as non-compliance and followed by repeated demands, increased prompting, physical intervention, or removal of choice. These responses may sometimes be necessary in relation to significant health or safety risks, but their use should remain proportionate, justified, and subject to review.

Trauma-responsive practice reinforces this principle through its emphasis on safety, trustworthiness, collaboration, empowerment, voice and choice (SAMHSA, 2014). The behavioural significance of these principles lies in the opportunities they create. An environment in which disagreement can be expressed safely provides a different behavioural context from one in which disagreement is systematically interpreted as a problem to be overcome.

This is also why the concept of supported refusal deserves greater attention within behavioural practice. Refusal should not automatically be conceptualised as a behaviour requiring reduction. It may instead provide important information about the fit between the person and the environment. Where refusal creates significant risk or interferes with essential care, the task is to determine why the activity is difficult, what function the refusal serves, what alternatives are available, and whether the environment can be modified while maintaining necessary safety.

Respecting autonomy does not require accepting every decision regardless of consequences, nor does it remove professional responsibilities concerning health, safeguarding or immediate safety. Rather, it requires practitioners to distinguish the existence of risk from the assumption that greater control is always the appropriate response to risk.

A person who is supported to make decisions may still make choices that professionals would not make themselves. Agency includes the possibility of disagreement. If the only behaviour regarded as evidence of successful intervention is compliance, then services may inadvertently reinforce a model in which the person's wellbeing is equated with their willingness to do what others have decided.

That is precisely the point at which *behaviour that challenges* risks becoming a diagnosis of the environment: when the behaviour considered problematic is not necessarily harmful in itself, but is problematic because it conflicts with the preferences, routines, expectations, or organisational requirements of the people providing support.

4.4 From Individual Deficit to Environmental Formulation

The central concern, therefore, is not that challenging behaviour is caused by the environment, nor that environmental explanations should replace individual functional assessment. It is that the environment is part of the behaviour's context and therefore part of its formulation.

A person may have genuine behavioural difficulties that require targeted intervention. Physical health conditions may need treatment. Communication skills may need development. Alternative behaviours may

need to be taught. Reinforcement contingencies may need to be altered. Staff may require training and supervision. Restrictive interventions may occasionally be necessary to manage immediate and serious risk. None of this is inconsistent with a trauma-responsive behavioural framework.

An individual-deficit formulation may ask: *How can we make this person stop hitting? How can we increase compliance? How can we prevent refusal? How can we make them tolerate this activity?*

An environmental formulation asks additional questions: *Under what conditions does the behaviour occur? What function does it serve? What alternatives are available? What happens when those alternatives are used? What demands are being placed on the person? How are communication attempts responded to? What opportunities exist for refusal and choice? What has the person learned about their ability to influence the environment? What are staff and organisational responses contributing to the pattern? And what can be changed without compromising necessary safety?*

These are not competing formulations. The second encompasses the first while expanding the unit of analysis.

This position is strongly supported by existing behavioural guidance. NICE recommends that behavioural assessment consider current and past personal and environmental factors, the role of services and staff, communication, physical and mental health, sensory needs, life history, previous interventions, and the person's usual environments. It also recommends that behavioural interventions modify environmental factors that contribute to behaviour and address staff and carer responses (NICE, 2015). For autistic adults, NICE similarly requires consideration of social and physical environments, communication, changes in routine and personal circumstances, and past history of care and support (NICE, 2021a).

The framework proposed here therefore does not represent a departure from functional behavioural assessment. Rather, it argues for functional assessment conducted within a sufficiently broad environmental frame.

This also protects against the opposite error: environmental romanticism. Not every difficult behaviour is caused by a poor environment. Not every service response is harmful. Not every restrictive intervention represents unnecessary control. Not every person who refuses an activity is communicating an important preference. Behavioural and trauma-responsive practice must retain sufficient empirical discipline to test hypotheses rather than adopt whichever explanation appears most compassionate.

The task is therefore one of curious precision. The practitioner should remain open to environmental, relational and historical explanations while continuing to measure behaviour, examine contingencies, identify alternative hypotheses and evaluate whether environmental changes produce meaningful differences. Where a proposed environmental variable changes and the behavioural pattern changes correspondingly, that provides stronger evidence that the variable is functionally relevant. Where it does not, the formulation must be reconsidered.

Trauma adds another layer to this process but does not replace it. People with intellectual disabilities have substantial exposure to trauma and adversity, and the literature identifies the importance of trauma assessment and trauma-responsive pathways (McNally et al., 2021). However, the presence of trauma within a person's history does not establish that a particular episode of aggression, self-injury, withdrawal, or refusal is trauma-driven. Trauma should therefore remain one possible component of formulation alongside communication, physical health, sensory conditions, reinforcement histories, relationships, environmental demands, autonomy, and other relevant variables.

The resulting formulation is broader without becoming less behavioural. Behaviour remains something that can be observed, measured and analysed. What changes is the range of variables considered relevant to that analysis.

The central proposition can therefore be stated more precisely:

Behaviour that challenges should not be understood solely as a characteristic of the person when the

conditions in which that behaviour occurs are themselves contributing to its development, maintenance, or expression.

This does not absolve services of the responsibility to manage risk. It gives them an additional responsibility: to examine whether the environment can be changed so that the person has safer, more effective and more autonomous ways of achieving what the behaviour currently accomplishes.

That shift has important implications for the intervention model developed later in this paper. The goal is not simply to reduce aggression or self-injury. It is to alter the behavioural ecology in which those behaviours occur: increasing communication, predictability, meaningful choice, effective refusal, participation, social connection and access to reinforcing activities, while reducing unnecessary demands, uncertainty, coercion and environmental conditions that contribute to distress.

The question is therefore no longer simply whether the person's behaviour can be made less challenging. It is whether the environment can become less challenging for the person. This provides the bridge into the next section, which considers aggression and self-injury more specifically through a trauma-responsive behavioural lens.

AGGRESSION AND SELF-INJURY THROUGH A TRAUMA-RESPONSIVE BEHAVIOURAL LENS

5.1 Aggression and Self-Injury Are Not Self-Explanatory

Aggression and self-injury represent some of the most complex and consequential forms of behaviour encountered across disability, developmental, mental-health, educational, and social-care services. Both can present substantial risks to the individual and to others and may result in increased involvement from services when existing support arrangements are unable to maintain safety. Their seriousness, however, should not lead to an assumption that their meaning is self-evident. The observable form of aggression or self-injury provides important information about what is occurring, but it does not, in itself, establish why the behaviour occurs. A systematic review of aggressive behaviour among adults with intellectual disabilities found associations across behavioural, psychiatric and psychosocial factors, while concluding that the aetiology of aggression is specific to the individual and context and may be multifactorial (van den Akker et al., 2021). Similarly, a systematic review of assessment approaches for challenging behaviour among people with intellectual and developmental disabilities highlighted the importance of systematic assessment rather than relying on behavioural presence or diagnostic categorisation alone (Reyes-Martín et al., 2022).

Functional assessment therefore remains fundamental. NICE guidance recommends identifying factors that trigger or maintain behaviour, examining the consequences that follow it, and considering physical health, mental health, communication, sensory factors, social relationships, environmental conditions, changes in routine and personal circumstances. For autistic adults, functional analysis is explicitly recommended as part of assessment, with interventions directed towards identified physical, social and environmental contributors as well as behavioural contingencies (NICE, 2021a). For people with intellectual disabilities, NICE similarly recommends consideration of current and past personal and environmental factors, the role of services and staff, life history including trauma or abuse, communication, sensory needs, the care environment, and the person's usual environments (NICE, 2015).

A trauma-responsive perspective does not replace this process. Rather, it adds another potential layer of formulation by asking whether experiences of adversity, threat, loss of control, disrupted relationships, or previous service interactions may form part of the history within which the behavioural pattern has developed. Trauma can become reductive if it is treated as a universal explanation for behaviour. The appropriate question is not whether a person with aggression or self-injury has experienced trauma, but whether trauma or adversity is relevant to the conditions under which the behaviour currently occurs.

This is particularly important because the same topography may serve different functions for different people,

and the function of behaviour may change across contexts and over time. A person may hit to terminate an interaction, escape a demand, obtain assistance, respond to pain, communicate distress, or alter an environment experienced as intolerable. Self-injury may similarly be associated with biological, sensory, communicative, behavioural, emotional, or contextual variables. The behavioural presentation therefore provides the starting point for assessment rather than its conclusion.

Physical health must remain part of this formulation. Pain, sleep disturbance, sensory impairment and other physical conditions can contribute to behaviour that challenges among people with intellectual disabilities, reinforcing the need to avoid interpreting behavioural change automatically through psychological or trauma-based explanations (de Winter et al., 2011). NICE similarly recommends addressing identified physical and mental-health factors before or alongside behavioural intervention (NICE, 2015).

The same caution applies to psychological distress. An individual may experience anxiety, fear or emotional distress without aggression or self-injury being a direct expression of those experiences. Conversely, behaviour that appears behavioural or oppositional may occur in circumstances of significant emotional distress. The task of formulation is therefore to examine the relationships between these variables rather than assigning a single cause to the behavioural presentation.

5.2 When Behaviour Is the Most Effective Available Response

For people with significant communication, cognitive, developmental or intellectual disabilities, the relationship between behaviour and communication requires particular attention. A person may have limited access to conventional language for describing fear, confusion, pain, frustration, interpersonal threat or emotional distress while nevertheless possessing a behavioural repertoire through which they influence their environment. This does not mean that aggression or self-injury should automatically be interpreted as communication. Rather, it raises a more precise behavioural question: what means does this person currently have for influencing what happens to them, and how effective are those means?

A behaviour can become more likely when it is one of the most reliable responses available to the individual. If a person cannot effectively communicate that they want an interaction to stop, aggression may consistently produce distance or termination of the interaction. If a person cannot communicate that they do not understand a demand, refusal or escalation may eventually result in the demand being withdrawn. If a person has limited opportunities to influence where they go, who supports them, what activities they undertake, or how interventions are delivered, more intense behaviour may become one of the few responses that reliably changes the environment.

The relevant behavioural principle is not that the person consciously selects aggression or self-injury as a strategy. It is that behaviour followed by effective environmental change may become more likely under similar conditions. This is precisely why functional assessment examines consequences and reinforcement. NICE recommends identifying the consequences that maintain behaviour and developing alternative behaviours that achieve the same purpose through new skills, including improved communication, emotional regulation or social interaction (NICE, 2015).

The nuance is particularly important where lower-intensity forms of communication have historically been ineffective. A person may initially communicate refusal through turning away, moving away, vocalising, using a communication device, gesturing or verbally saying no. If those responses are repeatedly ignored, the person may eventually engage in behaviour that produces a more immediate environmental consequence. The resulting escalation should not be interpreted as evidence that the person has chosen a more problematic form of communication. It may instead indicate that the behavioural environment has differentially reinforced more intense responses.

This possibility is especially relevant to self-injury. Research examining self-reported explanations for self-injury among people with intellectual disabilities identified themes including relief from overwhelming emotions, trauma and loss, and difficulty articulating emotional experiences, while also highlighting the limited amount of research that directly asks people with intellectual disabilities about their own self-injury

(Samways et al., 2024). This finding is important because it cautions against allowing professional interpretations to displace the person's own account. Where communication support makes direct self-report possible, the individual's perspective should form an important part of formulation.

The same principle applies to aggression. The function of aggression cannot be inferred simply because the behaviour occurs following a demand. The demand may be aversive because of its content, response effort, sensory conditions, uncertainty, interpersonal context, previous learning history, or several interacting factors. The practitioner therefore needs to determine what changes when the demand is modified, when alternative communication is provided, when choice is increased, or when the person is given an effective way to pause or refuse.

This creates a direct connection between behavioural function and autonomy. If a person can communicate *no* and that communication reliably produces an appropriate environmental response, refusal becomes a functional behavioural option. If *no* is routinely ignored until the person escalates, escalation may acquire greater behavioural effectiveness. The issue is therefore not simply whether the person displays refusal, but what happens when they refuse.

A trauma-responsive behavioural approach should consequently seek to increase the availability and effectiveness of lower-risk behavioural alternatives. This might include accessible communication, supported refusal, requests for assistance, requests for breaks, predictable transitions, environmental adaptations, choice-making, emotion-regulation strategies, or other responses identified through individual functional assessment. NICE specifically recommends environmental adaptation and development of alternative behaviours that achieve the same function as behaviour that challenges (NICE, 2015).

The goal is not to teach the person to communicate in ways that are convenient for the service. It is to create conditions in which communication is sufficiently effective that the person does not need increasingly intense behaviour to influence their environment.

This is central to the framework proposed here: the relevant behavioural deficit may sometimes lie not only in the person's repertoire, but in the environment's failure to make alternative repertoires effective.

5.3 Trauma, Threat and the Meaning of the Environment

Trauma becomes particularly relevant when considering why apparently ordinary situations may acquire heightened behavioural significance for some individuals. An interaction that appears routine to an observer may be experienced differently by someone who has previously encountered coercion, abuse, restraint, exploitation, repeated loss of control, or significant relational disruption. A request to comply with an instruction, an unfamiliar professional entering personal space, physical proximity, an unexpected demand, or an abrupt change in routine may therefore acquire meaning through previous experience.

Research concerning trauma among people with intellectual disabilities has identified substantial exposure to traumatic and adverse experiences and has highlighted the importance of appropriate assessment and trauma-informed pathways (McNally et al., 2021). More recent work examining trauma-informed practice for children and young people with intellectual disabilities similarly identifies challenges in recognising trauma and implementing trauma-informed approaches for this population (Wilson et al., 2026). These findings support the relevance of trauma history within formulation, but they do not establish that a particular episode of aggression or self-injury is trauma-related.

Trauma-informed interpretation asks whether previous experiences may be relevant to how a person currently experiences safety, control, relationships, demands or particular environments. Trauma-based attribution assumes that trauma is the explanation for the behaviour. The first expands assessment; the second risks prematurely closing it.

For example, a person who becomes distressed when a professional enters their personal space may have a history of experiences in which bodily boundaries were not respected. That history may be relevant. However,

the behaviour might also be influenced by sensory sensitivity, communication difficulty, anxiety, unfamiliarity with the professional, pain, or a learned escape contingency. The appropriate formulation therefore retains multiple hypotheses and examines what happens when the relevant environmental variables change.

This is particularly important because trauma may influence the meaning of a present situation without determining the behavioural function in a simple or exclusive way. A physical examination may evoke fear for one person because of previous experiences, while for another it may be difficult because of sensory sensitivity or communication barriers. For a third person, the primary issue may be lack of predictability. The observable behaviour may look similar while the relevant variables differ.

The person's own perspective is therefore particularly valuable. Samways et al. (2024) found that the existing literature directly examining self-reported explanations for self-injury among people with intellectual disabilities is limited, despite evidence that individuals themselves can identify emotional, trauma-related and other experiences associated with their behaviour. The absence of conventional verbal communication should not be treated as an absence of experience, preference or agency; rather, services should use appropriate communication supports to maximise the person's opportunity to contribute to formulation.

Trauma-responsive practice also requires consideration of what happens *after* behaviour occurs. The immediate priority may appropriately be safety, particularly where aggression or self-injury creates a significant risk of serious harm. Physical intervention, increased observation, environmental restriction, emergency admission, removal from an activity, or changes in placement may sometimes be necessary. However, the necessity of an immediate response does not remove the need to examine its subsequent effects. A response can therefore be necessary in the moment and still require critical review afterwards.

For an individual with a history of coercive or frightening experiences, repeated exposure to restrictive responses may influence expectations of future interactions. Increased surveillance may alter opportunities for autonomy. Removal from familiar environments may increase uncertainty. Repeated professional intervention may change how new relationships are approached. These possibilities should not be assumed to represent retraumatisation, but they warrant consideration within a trauma-responsive formulation. SAMHSA's trauma-informed framework emphasises safety, trustworthiness, collaboration, empowerment, voice and choice, while seeking to resist retraumatisation (SAMHSA, 2014). The implication is that risk management should not be evaluated solely by whether it successfully stopped an immediate behaviour. It should also be examined in terms of what behavioural and relational conditions it creates afterwards.

This is particularly important where restrictive responses become progressively embedded within the person's everyday environment. A service may initially introduce a restriction following a serious incident, then retain it because staff perceive the person as high risk, then introduce further restrictions because the original restriction has reduced opportunities for participation or increased distress. Over time, an intervention intended to increase safety can become part of an increasingly restrictive behavioural ecology.

This does not mean that restrictive interventions are inherently harmful or unnecessary. It means that their function, proportionality, duration and longer-term consequences require continuing assessment. NICE recommends least-restrictive approaches, environmental modification, development of alternative skills and ongoing review of behaviour support plans and restrictive interventions (NICE, 2015).

The trauma-responsive behavioural position is therefore neither *"all aggression is trauma"* nor *"trauma is irrelevant to behaviour."* It is that previous experiences may alter how current environments are experienced and responded to, and that this possibility should be investigated alongside established behavioural, physical, developmental and environmental variables.

5.4 From Behaviour Reduction to Behavioural Repertoire

These considerations have direct implications for how successful intervention is defined. Behaviour reduction is an important outcome when aggression or self-injury presents significant risk. However, reduction alone does not establish whether the intervention has improved the person's life or altered the conditions associated

with the behaviour.

A reduction achieved through increased restriction, removal of meaningful activities, suppression of communication, or withdrawal from social environments represents a different outcome from a reduction achieved because the person has gained more effective ways to communicate, regulate demands, make choices, access reinforcement, seek assistance and influence their environment.

This separation is consistent with NICE guidance, which explicitly states that behavioural interventions should focus on quality-of-life outcomes alongside identified target behaviours and should modify environmental factors that contribute to behaviour (NICE, 2015). NICE also states that the focus for people with learning disabilities should be on improving the person's support and increasing their skills rather than simply changing the person.

The intervention literature also illustrates the importance of maintaining appropriate caution. Groves et al. (2023), in a systematic review and meta-analysis of randomised controlled trials examining interventions for behaviours that challenge in people with intellectual disabilities, found relatively small effects across several behavioural topographies. The heterogeneity of interventions and the need for greater precision concerning intervention components and outcomes reinforce the importance of specifying not simply whether behaviour changed, but what changed, under what conditions, and with what consequences for the person.

The objective should therefore be to expand the person's behavioural repertoire rather than simply suppress the most visible behaviour. A person who previously relied on aggression to terminate an interaction may develop an effective way of requesting a break. A person who previously used self-injury when overwhelmed may develop accessible methods of requesting assistance or reducing sensory demands. A person who previously responded to transitions through escalation may develop more effective ways of anticipating and negotiating change. These are not universal outcomes and cannot be assumed in advance; they are potential behavioural targets to be identified through individual assessment.

This is where autonomy becomes behaviourally significant. Meaningful choice is not simply something added to an intervention plan after functional analysis has been completed. Where choice changes the person's access to preferred activities, ability to refuse, opportunity to negotiate, or capacity to influence the environment, it changes the contingencies within which behaviour occurs.

The recent TIBR/BRA framework provides a useful conceptual parallel here. Gallagher et al. (2026) conceptualise behavioural opportunity as an environmental condition that makes behaviour possible, accessible and sufficiently safe to attempt, and argue that repeated opportunities for action, choice and reinforcement may support the development and maintenance of alternative behavioural repertoires. Its empirical context is recovery following domestic abuse rather than autism or intellectual disability, so it should not be treated as evidence that these mechanisms have been established in the population considered here. Its relevance is conceptual: *the environment can be designed not only to prevent behaviour, but to make alternative behaviour possible and effective.*

This proposition is particularly important for people whose lives have involved repeated professional intervention. If a person has learned that their environment changes only when behaviour reaches a particular level of intensity, reducing that behaviour without increasing access to alternative forms of influence may leave the underlying behavioural problem unresolved. Intervention must therefore consider both sides of the contingency: what the person is doing and what the environment does in response.

The same principle applies to staff behaviour. If staff consistently respond to early communication, requests for assistance and lower-intensity expressions of distress, those responses may increase the effectiveness of alternative behavioural repertoires. If staff respond only once behaviour reaches a crisis level, the service may inadvertently establish a very different behavioural contingency. NICE explicitly recommends proactive strategies, environmental and routine adaptations, alternative behaviours, early responses to distress, and staff training and supervision (NICE, 2015).

The desired outcome is therefore not simply: less aggression + less self-injury.

It is:

more effective communication + more meaningful choice + safer behavioural alternatives + greater participation + improved quality of life + reduced reliance on high-risk behaviour.

The contrast is important because a person can display fewer incidents while simultaneously experiencing less autonomy, fewer relationships, reduced community participation, or greater restriction. Conversely, a person may initially display more overt disagreement when they are given meaningful opportunities to express preferences because communication has become more effective. Behavioural frequency must therefore be interpreted within the wider context of what the person is able to do and what happens when they do it.

Aggression and self-injury must consequently remain visible as behaviours requiring skilled assessment and appropriate risk management, but they should not become the entirety of the person's clinical identity. A comprehensive formulation asks what the behaviour looks like, what precedes it, what follows it, what function it may serve, what physical and psychological variables may be relevant, what the individual has experienced, what the environment communicates to them, and what opportunities they have to exercise influence without relying on harmful behaviour.

This maintains the empirical discipline of functional behavioural assessment while incorporating the relational and historical considerations central to trauma-responsive practice. It shifts the objective from simply controlling behaviour towards creating conditions in which the person can experience greater safety, agency, communication, autonomy and quality of life.

The central proposition of this section is therefore:

The aim is not simply to make high-risk behaviour less likely. It is to make safer, more effective and more autonomous behaviour more possible.

Once this principle is taken seriously, the service system itself becomes an appropriate subject of assessment. The next section therefore moves from the individual behavioural presentation to the developmental trajectory across adolescence and adulthood, asking how these behavioural and service processes may change as the person's environments, relationships, expectations and support systems change.

ADOLESCENCE AND THE DEVELOPMENTAL CONTEXT OF BEHAVIOUR

6.1 Adolescence as a Changing Behavioural Environment

Adolescence represents a period of substantial developmental, social, emotional, and environmental change. These changes can be particularly significant for young people with autism, intellectual disabilities, cognitive delays, developmental disabilities, or complex communication needs because developmental transitions may occur alongside substantial changes in the expectations, relationships and environments surrounding them. Puberty, increasing social expectations, changes in educational provision, emerging independence, transitions between services, changing family relationships, and growing expectations around decision-making can all alter the conditions in which behaviour occurs. NICE guidance identifies communication difficulties, anxiety and depression, sensory factors, changes to routine, social and environmental circumstances, puberty, exploitation or abuse, and lack of predictability or structure among factors that may contribute to behaviour that challenges in autistic children and young people (NICE, 2015). These factors do not operate independently, and their significance will vary according to the individual's developmental profile and circumstances. Adolescence may therefore represent not simply a period of behavioural change, but a period in which previously manageable vulnerabilities interact with increasingly complex environmental demands.

The significance of adolescence lies partly in the fact that the behavioural environment itself is changing. A

child may previously have experienced relatively consistent routines, familiar adults and substantial adult mediation of everyday demands. As adolescence progresses, expectations may increase around education, relationships, health, self-care, decision-making and social participation. At the same time, the young person may encounter new environments, unfamiliar people and more complex forms of communication. A behaviour that was previously manageable within a familiar environment may therefore acquire different consequences as the surrounding system changes.

The transition can also alter the relationship between the young person and the systems around them. Parents, teachers or familiar carers may previously have understood idiosyncratic communication, anticipated distress, adapted demands, or provided informal opportunities for choice. Adolescence can introduce expectations that the young person should increasingly manage appointments, education, relationships, health decisions and daily activities with greater independence. For some individuals, these expectations may develop alongside genuine increases in capacity and confidence. For others, the demands may exceed the support available to them. Difficulties may then be interpreted as behavioural resistance or failure to develop independence when the underlying issue may involve communication, processing demands, anxiety, sensory factors, environmental mismatch, or insufficiently adapted support.

This creates an important distinction between expecting independence and supporting autonomy. Increasing autonomy does not mean removing support. Rather, support may need to change so that the young person has increasing opportunities to participate in decisions and exercise control at a level appropriate to their abilities and circumstances. A person may remain dependent upon assistance while simultaneously becoming more involved in determining how that assistance is provided.

Adolescence may also alter the consequences that follow behaviour. A child who refuses an activity may previously have been accommodated by a parent or teacher, whereas an adolescent may encounter disciplinary procedures, exclusion, increased supervision, restrictive responses, or referral to specialist services. Aggression or self-injury that previously occurred within a familiar family environment may subsequently be managed through increasingly formal systems of risk assessment and intervention. The behavioural consequences can therefore change even when the topography of the behaviour has not fundamentally changed. From a behavioural perspective, these changing consequences may alter the individual's learning environment; from a trauma-responsive perspective, they may also influence how the young person experiences safety, authority, relationships and control.

This nuance is particularly important because behavioural escalation during adolescence should not automatically be understood as evidence of deterioration within the individual. Developmental transitions may change the demands placed upon the person, the consequences following behaviour, and the behavioural alternatives available to them. A previously effective response may become ineffective in a new environment, while behaviours that were previously tolerated may produce substantially different consequences. Functional assessment must therefore remain sensitive to developmental and environmental change rather than assuming that the same behaviour has the same function throughout adolescence.

Adolescence is also a period in which safeguarding considerations become increasingly important. Young people with developmental and intellectual disabilities may experience vulnerabilities associated with dependence on others, communication barriers, social isolation, difficulty recognising unsafe situations, or reduced opportunities to disclose concerns. NICE specifically identifies exploitation and abuse as factors that may be relevant when assessing behaviour that challenges in autistic children and young people (NICE, 2015). A sudden increase in aggression, self-injury, withdrawal, sleep disturbance, avoidance, or changes in participation should therefore prompt appropriate consideration of physical health, interpersonal circumstances and safeguarding alongside behavioural and psychological explanations.

Such changes should not automatically be interpreted as evidence of trauma or abuse. They may reflect pain, illness, anxiety, sensory overload, developmental transitions, environmental change, interpersonal conflict, changes in routine, or other factors. The significance of the behavioural change lies partly in the fact that it represents a departure from the person's established pattern. A trauma-responsive behavioural approach

therefore requires practitioners to investigate what has changed around the behaviour rather than allowing the behaviour itself to become the explanation.

6.2 Communication, Autonomy and Emerging Agency

Communication becomes particularly important during adolescence because expectations concerning self-expression and self-advocacy often increase at precisely the point at which the environments surrounding the young person become more complex. Young people may be expected to explain internal experiences, describe symptoms, report interpersonal difficulties, understand increasingly complex information, make choices and advocate for themselves in environments that have historically relied heavily on adult interpretation.

For individuals with intellectual disabilities, cognitive delays, autism, developmental disabilities, or significant communication differences, the gap between what is expected and what is supported may consequently become increasingly pronounced. When a young person cannot readily communicate that they are overwhelmed, frightened, confused, in pain, being bullied, experiencing sensory distress, or disagreeing with a proposed course of action, behaviour may become more prominent as a means of influencing the environment. This does not establish that challenging behaviour is communication. Rather, it highlights the need to examine whether the person has effective means of communicating both distress and preference.

Research examining self-injury from the perspective of people with intellectual disabilities identified difficulties articulating emotional experiences among themes associated with self-injurious behaviour, alongside overwhelming emotions and experiences of trauma and loss (Samways et al., 2024). The importance of this evidence lies not in establishing a universal explanation for self-injury, but in demonstrating the value of considering the individual's own experience and the possibility that communication difficulties may constrain access to lower-risk ways of expressing distress.

The behavioural environment therefore matters greatly. If a young person can communicate that they need a break, do not understand an instruction, want an activity to stop, or disagree with a proposed course of action, and those communications reliably influence what happens next, the young person has access to behavioural alternatives that may be less risky than aggression or self-injury. If those forms of communication are repeatedly unsuccessful, the behavioural value of more intense responses may increase. The task is consequently not simply to teach communication skills, but to ensure that communication is effective within the environment in which it is used.

The increasing importance of autonomy during adolescence creates a further tension for services. Young people may simultaneously require protection and greater opportunities to exercise choice, and these objectives can sometimes be treated as inherently incompatible. A risk-focused response may prioritise supervision, predictability and control, while an autonomy-focused approach may seek to increase independence and decision-making. A trauma-responsive behavioural perspective instead requires these aims to be considered together.

The question is not whether a young person should have either safety or autonomy, but how the environment can provide appropriate protection while maximising opportunities for meaningful choice. This may involve structured alternatives, accessible communication, additional processing time, support to understand consequences, involvement in behavioural or safety planning, and identification of decisions that the young person can make independently or with support. Such approaches are consistent with trauma-informed principles of empowerment, voice and choice (SAMHSA, 2014), while also creating behavioural opportunities for the young person to influence their environment without relying on aggression, self-injury or withdrawal.

This is particularly important when behavioural interventions are implemented during adolescence. If the primary objective is compliance, an intervention may increase the likelihood that a young person follows instructions while doing little to develop their capacity to communicate disagreement, negotiate, make decisions, seek assistance, or regulate distress. Conversely, an intervention that teaches and reinforces functional communication, self-advocacy, help-seeking, refusal, negotiation and choice may increase access to alternative behavioural repertoires while reducing reliance on more harmful responses where those responses

have been serving identifiable functions.

There is a pivotal difference because the goal of behavioural intervention should not be to make the young person easier for adults or services to manage. The goal should be to increase the range of behaviours through which the young person can participate successfully in their environment and achieve outcomes that matter to them.

This is consistent with the broader literature on self-determination among people with intellectual disabilities. Kuld et al. (2023) identified interventions addressing choice-making, independence, problem-solving, meaningful activities and relationships, community participation, autonomy, supportive decision-making and self-advocacy. Although the evidence base remains heterogeneous and relatively limited for some intervention components, the review demonstrates that self-determination can be supported through changes in environments, relationships, assistance and behavioural opportunities rather than being treated solely as an internal personal characteristic.

The developmental significance of this is considerable. Adolescence is not simply a period during which adults should prepare a young person to become independent. It is a period during which the person is practising the behavioural repertoires through which they will later exercise autonomy. If opportunities to choose, refuse, negotiate, problem-solve and communicate are consistently replaced by adult decision-making, the young person may have fewer opportunities to practise those behaviours. If support instead creates opportunities for meaningful participation, the young person may enter adulthood with a broader repertoire for navigating decisions and relationships.

The relevant question is therefore not simply "what *can this young person do independently?*". It is what can this young person do with the right support, and does the environment provide sufficient opportunities for those behaviours to become effective?

6.3 From Adolescent Behaviour to Adult Service Trajectory

Adolescence also represents an important point at which service histories may begin to accumulate more rapidly. A young person may move between educational settings, paediatric and adult health services, disability services, mental-health provision, behavioural support, social care, and other systems within a relatively short period. Each transition can introduce new professionals, expectations, terminology, assessments and intervention approaches. For individuals who already experience difficulty with uncertainty or change, repeated transitions may become an important environmental variable.

Research examining autistic adults' experiences of accessing mental-health support has highlighted difficulties associated with inflexible services, poor fit between services and individual needs, communication barriers, and difficulties establishing therapeutic relationships, while also identifying collaboration and empowerment as important features of more effective support (Brede et al., 2022). Although this research concerns adults, it is relevant to the developmental trajectory through which young people may enter adult services with established expectations about professional relationships, assessment and support.

The transition into adulthood therefore deserves particular attention because it may expose the cumulative effects of earlier service experiences. A young person who has repeatedly experienced decisions being made for them, communication difficulties, exclusion, restrictive responses, or unsuccessful interventions may enter adulthood with limited confidence in their ability to influence services. Conversely, a developmental environment that consistently supports communication, autonomy, problem-solving and meaningful participation may help establish behavioural repertoires that remain valuable across changing contexts.

The difference is not simply one of skill acquisition. It is also one of behavioural history. The young person is learning, through repeated interactions, whether communication is effective, whether refusal is respected, whether help-seeking produces assistance, whether professionals listen, whether mistakes can be tolerated, and whether participation gives them meaningful influence. These experiences may subsequently shape expectations within adult services.

This provides a developmental extension of the service-history argument developed earlier in this paper. The service history does not suddenly begin in adulthood. It may already be shaping behavioural expectations during adolescence. School exclusions, repeated changes of placement, unsuccessful interventions, restrictive responses, hospital admissions, changes in key professionals, or repeated experiences of not being understood may each become part of the behavioural context through which subsequent services are encountered. Equally, positive experiences of communication, trusted relationships, successful advocacy, meaningful choice and supportive participation may become part of a protective behavioural history.

The transition to adulthood can therefore represent either a continuation of an established service trajectory or an opportunity to alter it. If previous patterns are carried forward without examination, a young person's existing behavioural reputation may follow them into adult services. Documentation may emphasise previous incidents without adequately recording the conditions under which they occurred, the communication strategies that were effective, or the circumstances in which behaviour did not occur. The new service may consequently inherit a behavioural formulation without inheriting the environmental history necessary to interpret it.

This is particularly concerning when the transition is framed primarily around increased independence. A young person may be expected to take greater responsibility for appointments, treatment, communication, daily living or decision-making while simultaneously having limited access to the support necessary to exercise those responsibilities. Behavioural difficulties may then be interpreted as evidence that the person is not ready for adulthood, when the underlying issue may be that the environment has increased expectations faster than it has increased behavioural opportunity.

A more developmental formulation instead asks what capacities the person is being given opportunities to practise. Can they communicate preferences to unfamiliar professionals? Can they request clarification when they do not understand? Can they indicate that they need a break? Can they participate in decisions about their support? Can they disagree without losing access to relationships or activities? Can they recover from mistakes without the environment becoming more restrictive? These are not simply indicators of independence. They are behavioural repertoires that may support safer and more autonomous participation across adulthood.

This perspective also changes how intervention during adolescence should be evaluated. The question is not only whether current aggression, self-injury, withdrawal or refusal decreases. It is whether the young person is developing behavioural repertoires that will remain functional when the surrounding environment changes. This includes communication, self-advocacy, help-seeking, negotiation, emotional regulation, decision-making, tolerance of appropriate uncertainty, and the ability to access reinforcing social and community environments.

The concept of behavioural opportunity is relevant here as a conceptual bridge. The TIBR/BRA framework proposes that environments can be intentionally designed to create opportunities for behaviours to be attempted, practised and reinforced, with repetition supporting generalisation and maintenance. Although that framework was developed in the context of recovery following domestic abuse and should not be treated as empirical evidence for autistic people or people with intellectual or developmental disabilities, the underlying proposition is relevant: what a person repeatedly has the opportunity to practise within one environment may influence what behavioural repertoires are available when that environment changes.

This makes adolescence particularly important within a behavioural-developmental framework. The environments surrounding a young person are not merely responding to behaviour; they are providing opportunities for behavioural repertoires to develop. If those opportunities are predominantly centred on compliance, following instructions, tolerating demands and responding to adult direction, then the person may have fewer opportunities to practise negotiation, initiation, decision-making and self-advocacy. If the environment deliberately creates opportunities for these behaviours and responds meaningfully when they occur, the behavioural repertoire available to the young person may broaden.

The objective of trauma-responsive practice during adolescence is therefore not simply to prevent current crises. It is to consider what behavioural, relational, communicative and decision-making capacities the young

person is developing for adulthood.

This developmental perspective provides the bridge to the next section. Adolescence introduces changing demands and opportunities, but adulthood can bring something different: the accumulation of years of interaction with systems of support. For some individuals, the behavioural consequences of that accumulated history may become increasingly evident as services become a dominant part of everyday life.

ADULTHOOD AND THE ACCUMULATION OF SERVICE EXPERIENCE

The transition into adulthood does not leave previous developmental, relational and service experiences behind. For many people with autism, intellectual, cognitive or developmental disabilities and complex communication or support needs, adulthood may involve continued or intensified contact with health, disability, mental-health, behavioural, social-care, housing and community services. Individuals may enter adult services carrying years of assessments, educational interventions, behavioural programmes, placement transitions, professional relationships and experiences of both successful and unsuccessful support. These experiences may shape expectations about what services represent, how professionals respond and whether participation leads to meaningful change or further demands.

Behaviour may therefore be influenced not only by immediate contingencies but also by what previous interactions have taught the person to expect. A new professional may occupy a familiar role, while a new assessment may reproduce procedures, language or demands associated with earlier experiences. Where previous communication has repeatedly produced little meaningful environmental change, there may be limited expectation that communication will be effective. Such patterns should not automatically be interpreted as unwillingness or resistance. Research examining autistic adults' experiences of mental-health services has identified difficulties involving accessibility, communication, understanding of autism, therapeutic relationships and flexibility, alongside the importance of collaboration and empowerment (Brede et al., 2022).

The behavioural significance of service involvement depends partly on its intensity, duration and influence over everyday life. For some people, services occupy a limited part of daily life; for others, they substantially determine where they live, how their day is structured, who they interact with, what activities are available and which decisions they can make. Adulthood may therefore represent a period in which accumulated service experience becomes increasingly embedded within everyday behavioural and relational contexts.

7.1 When the Service Becomes the Everyday Environment

For some adults, services extend far beyond periodic appointments. Day programmes and residential settings may occupy substantial portions of everyday life, making staff, routines, activities, policies, communication systems and opportunities for choice part of the person's behavioural environment.

These arrangements may provide essential care, stability, safety and relationships, but their necessity does not remove the need to examine how much control the individual retains within them. Research concerning residential settings identifies the importance of participation, self-determination, choice and environmental quality, while Active Support research demonstrates that staff practice can influence engagement in everyday activities (Kozma et al., 2009; Flynn et al., 2018). Recent evidence similarly highlights communication, engagement, relationships, community integration and empowerment as important dimensions of effective day-service provision (Belsey & Harrison, 2026).

Predictable routines, familiar staff and clear expectations can reduce uncertainty and support participation. The issue is not whether structure exists, but who has influence within it and how much meaningful choice the person can exercise. A predictable environment can support autonomy when it enables anticipation and choice; it can become restrictive when predictability depends primarily on inflexibility, organisational convenience or risk management.

The density and repetition of these contingencies also matter. A single unwanted activity may have limited significance, whereas repeated experiences of being directed without meaningful choice may contribute to

avoidance or resistance. Similarly, repeated communication failures may alter the future effectiveness of communication. The behavioural environment should therefore be considered not only in terms of individual events but also the opportunities and contingencies created through repetition.

7.2 Cumulative Restriction, Dependency and Behavioural Narrowing

Long-term support may affect the opportunities available for behavioural development. A person who receives assistance with most aspects of daily life may have fewer opportunities to practise decision-making, negotiation, spontaneous communication, self-advocacy, problem-solving and independent initiation. This does not mean that support causes dependency; appropriate support can increase participation. The concern arises when support replaces opportunities for participation rather than enabling them.

A circular process can develop when limited opportunity is mistaken for limited ability. If a person has few opportunities to exercise a skill, they may appear less capable of doing so, leading to further restriction and still fewer opportunities. This can produce behavioural narrowing, in which the repertoire becomes increasingly organised around behaviours required by the service—following routines, waiting, transitioning, complying and responding to prompts—while opportunities to initiate, negotiate, refuse and influence decisions remain limited. Active Support findings are relevant here because changes in staff practice can increase engagement, demonstrating that participation is not determined solely by existing individual ability (Flynn et al., 2018).

The relevant question is therefore not simply how much support a person receives, but what behaviours that support enables them to practise. A person may require substantial assistance with personal care, medication, transport or communication while retaining meaningful autonomy over how that assistance occurs. The goal is not to reduce support because dependence is undesirable, but to ensure that support expands behavioural possibilities rather than unnecessarily narrowing them.

7.3 The Adult Service Relationship: Trust, Expectation and Engagement

Accumulated service experience may also shape the relational dimension of adulthood. Trust develops through repeated experiences in which communication is heard, boundaries are respected, expectations are predictable and preferences have meaningful consequences. For someone who has experienced frequent professional changes, unsuccessful interventions, restrictive practices or decisions made without meaningful participation, mistrust may reflect an established history rather than a personal deficit.

A trauma-responsive approach emphasises consistency, transparency, collaboration, predictability and choice (SAMHSA, 2014). These principles also have behavioural significance because they create opportunities for new learning: a service cannot require trust, but can provide repeated experiences through which trust becomes reasonable.

This is particularly relevant when disengagement is described as resistance. Missing appointments, refusing interventions, leaving settings or becoming distressed when support is introduced may be accurately documented, but such descriptions do not explain the conditions under which the behaviour occurs. Evidence concerning autistic adults' experiences of mental-health services supports the importance of service fit, communication, collaboration and therapeutic relationships (Brede et al., 2022).

Historical records can further influence how future professionals encounter the person. Descriptions such as *aggressive*, *resistant* or *difficult to engage* may become established through referrals, handovers and documentation, shaping expectations before a new practitioner has developed their own formulation. This can create behavioural and relational momentum, in which professional expectations influence interaction, interaction influences behaviour, and behaviour appears to confirm the original expectation. Historical records should therefore function as formulation data rather than behavioural destiny.

7.4 When Long-Term Support Becomes the Context for Long-Term Behaviour

Across time, service involvement can become both a behavioural and relational process: previous interactions influence expectations; expectations influence behaviour; behaviour influences professional responses; and those responses become part of subsequent learning. Where these patterns are repeatedly reinforced, they may contribute to established patterns of avoidance, escalation, mistrust, dependence or disengagement. They should not, however, be regarded as inevitable consequences of disability.

Long-term support can make such patterns difficult to see because established arrangements become routine. A restriction may become embedded in ordinary practice, a staff response may become automatic, or decisions may continue to be made on the person's behalf because this has historically been considered appropriate. From the service perspective, these arrangements may simply represent how the environment operates; for the person, they constitute the conditions of everyday life.

The division between lifelong support and lifelong control is therefore central. A person may require extensive support while retaining meaningful influence over decisions, communication, routines, relationships and participation. Evidence concerning autonomy and self-determination among people with intellectual disabilities highlights the importance of choice, supported decision-making, self-advocacy and environmental conditions that enable participation (Kuld et al., 2023; Sheerin et al., 2026).

Long-term support is consequently developmental as well as supportive. Through repeated interactions, environments provide opportunities for some behaviours to be strengthened while making others less necessary or less practised. The service is therefore not simply something a person receives; for those with sustained involvement, it becomes part of the environment in which they live, communicate, form relationships, make decisions and behave.

The implication is that long-term services should be evaluated not only by safety or incident reduction, but by the behavioural and relational environment they create over time. The next section translates this formulation into practice, considering how a trauma-responsive behavioural framework can guide assessment, environmental design, behavioural support and service delivery.

TRAUMA-RESPONSIVE BEHAVIOURAL PRACTICE: FROM UNDERSTANDING TO INTERVENTION

If behaviour is understood as emerging from the interaction between the individual and their environment, then intervention must extend beyond attempts to suppress or eliminate the behaviour itself. A trauma-responsive behavioural approach begins with the premise that meaningful change requires an understanding of the person, their developmental and behavioural history, their current environment, the function of the behaviour, and any experiences of adversity that may be relevant to the formulation. These elements should not be treated as competing explanations. Rather, they provide different perspectives on the same behavioural system. Functional assessment contributes an understanding of the contingencies surrounding behaviour; developmental and cognitive assessment helps establish what demands, expectations and forms of communication are appropriate; trauma-responsive practice encourages consideration of safety, relational history, threat, control and potential retraumatisation; and person-centred practice ensures that the individual's preferences, goals and quality of life remain central to intervention. The resulting approach is therefore neither a conventional behaviour-management model with trauma terminology added to it nor a trauma model that abandons behavioural analysis. It is an integrated approach in which behavioural principles are applied within environments deliberately designed to increase safety, autonomy, predictability, communication and meaningful participation.

8.1 Beginning with the Person, Not the Behaviour

The first requirement is that assessment begins with the person rather than the behavioural presentation. This means establishing an understanding of the individual's developmental history, communication profile,

cognitive and adaptive abilities, physical and mental-health needs, relationships, routines, preferred activities, previous interventions and experiences of service involvement. Where appropriate and possible, this should include the person's own account of what they experience as helpful, difficult, frightening, overwhelming or important. The value of this information extends beyond person-centred practice because it can substantially alter behavioural formulation. A behaviour that initially appears to function as escape from a particular task may, following more comprehensive assessment, be associated with communication difficulty, sensory overload, pain, anxiety, previous experiences of failure, or a perceived loss of control. NICE guidance similarly recommends assessment of physical health, mental health, communication, sensory factors, social circumstances, environmental conditions and changes in routine when behaviour that challenges is present (NICE, 2015).

This first stage should therefore avoid beginning with the question, *"How do we stop this behaviour?"* A more appropriate starting point is: "Who is this person, what is important to them, what are they communicating or attempting to achieve, and what conditions surround the behaviour?" This does not delay behavioural intervention unnecessarily. Rather, it reduces the risk of implementing an intervention against an incomplete formulation.

The assessment should also establish what the person can already do successfully. A formulation that records only deficits and incidents provides an incomplete account of the individual's behavioural repertoire. Practitioners should identify existing communication strategies, preferred activities, relationships in which engagement is successful, situations in which distress does not occur, and contexts in which the person already demonstrates choice, flexibility, self-advocacy or emotional regulation. These are not simply strengths to be recorded alongside the behavioural problem. They provide information about conditions under which alternative behaviour is already possible.

8.2 Functional Assessment Within a Trauma-Responsive Formulation

Functional assessment remains the central behavioural mechanism through which hypotheses are developed and evaluated. A trauma-responsive approach should not replace established behavioural methods for identifying antecedents, consequences, motivating operations, reinforcement histories, response effort, communication patterns and environmental variables. Rather, it should broaden the information available to the functional assessment. The practitioner may need to consider not only what immediately precedes an episode of aggression or self-injury, but whether the preceding event has acquired particular significance through the individual's learning history. Similarly, the consequences of behaviour should be considered not only in terms of immediate reinforcement but also in terms of whether repeated responses from services are contributing to longer-term patterns of avoidance, mistrust, dependence or escalation. NICE guidance supports this broader approach by requiring consideration of personal and environmental factors, previous interventions, the role of services and staff, and behavioural patterns across usual environments (NICE, 2015).

A useful formulation should therefore distinguish between observation, hypothesis and interpretation. Observation describes what occurred. Functional analysis generates hypotheses about what variables influence that behaviour. Trauma-responsive interpretation considers whether previous experiences may alter the significance of those variables. None of these should be treated as interchangeable.

For example, it may be observed that aggression occurs when a particular member of staff approaches.

The functional hypothesis may be that the approach predicts an unwanted demand or interaction. Historical information may indicate that the person has previously experienced intrusive or restrictive interactions with professionals. That history may be relevant to how the approach is experienced, but it does not establish that trauma is the function of the behaviour. The formulation remains testable: changes to the approach, communication, predictability, choice and consequences can be evaluated against subsequent behavioural patterns. This preserves the empirical discipline of behavioural practice while allowing trauma to inform the questions being asked.

8.3 Changing the Environment, Not Simply the Person

Once relevant variables have been identified, intervention should seek to modify conditions contributing to distress rather than assuming that the individual must adapt to an unchanged environment.

Environmental modification may involve sensory adaptations, reducing unnecessary demands, increasing predictability, changing communication methods, introducing structured opportunities for breaks, altering staffing arrangements, increasing access to preferred activities, addressing physical-health needs, or modifying routines and transitions. NICE guidance explicitly recommends environmental modification and attention to staff and carer responses where these contribute to behaviour (NICE, 2015).

The significance of environmental modification increases when services occupy a substantial proportion of the person's everyday life. For an adult attending a full-day programme or living within a residential setting, the environment is not simply where intervention occurs. It is where relationships are formed, choices are made, activities are undertaken, communication is practised and behavioural contingencies are repeatedly experienced. Evidence from Active Support research demonstrates that staff practices and organisational conditions can influence engagement and quality of support within residential environments (Flynn et al., 2018), while research concerning day services identifies engagement, relationships, communication, empowerment and community participation as important dimensions of effective provision (Belsey & Harrison, 2026).

Environmental assessment should therefore examine the fit between person and setting. Questions might include whether sensory demands are manageable, whether routines are sufficiently predictable without becoming unnecessarily rigid, whether activities are meaningful, whether communication is accessible, whether staff responses are consistent, whether the person can access preferred environments, and whether there are realistic opportunities to pause or withdraw from interactions.

Importantly, environmental modification does not mean removing every demand or creating an environment in which the person never experiences frustration, uncertainty or challenge. Such an environment would neither be realistic nor necessarily beneficial. The objective is to distinguish between necessary challenge and unnecessary environmental burden. Appropriate behavioural intervention may involve helping a person develop tolerance, flexibility or coping skills while simultaneously reducing demands that serve no meaningful purpose or that can reasonably be adapted.

8.4 Making Communication and Refusal Functionally Effective

Communication should be considered not simply as a skill located within the individual but as a relationship between the individual's behaviour and the environment's response. A person may possess a communication system yet still have limited functional communication if their messages do not reliably influence what happens around them.

This is particularly important for refusal. A trauma-responsive behavioural approach should not assume that every refusal represents a problem to be overcome. Refusal may communicate disagreement, discomfort, uncertainty, pain, sensory overload, a desire for privacy, or a legitimate preference. The appropriate response is therefore to determine what the refusal means within the particular context and whether the underlying demand can be modified, negotiated, postponed or replaced. Where an activity cannot reasonably be withdrawn because it concerns essential health or safety requirements, the person should nevertheless be supported to understand what is happening and to exercise as much choice as possible within the situation.

The behavioural question is straightforward: What happens when the person says no?

If saying no produces no meaningful change while escalation reliably produces a response, the behavioural environment may inadvertently favour escalation. If refusal is recognised early and produces an appropriate response, the person has access to a lower-risk behavioural alternative. The intervention target is therefore not simply the individual's ability to communicate refusal, but the functional effectiveness of refusal within the

environment.

This principle extends to requesting help, requesting a break, expressing pain, asking for clarification, indicating sensory discomfort, selecting between alternatives, and communicating emotional distress. A communication response must be reinforced by meaningful environmental consequences if it is to compete functionally with more intense behaviour.

8.5 Expanding Behavioural Repertoires Through Opportunity and Reinforcement

The fifth requirement is the deliberate development of alternative behavioural repertoires. Behavioural change is more sustainable when the individual has an effective alternative that serves a similar relevant function to the behaviour being reduced. If aggression functions to terminate an interaction, the intervention should create a reliable way of requesting that the interaction stop. If self-injury occurs when demands become overwhelming, the individual may need an effective way to request a break or communicate that the demand is too difficult. If behaviour occurs when the person cannot influence an activity or routine, meaningful choice and negotiation may provide alternative mechanisms of influence.

However, teaching an alternative response is insufficient if the environment does not respond to it. A person cannot reasonably be expected to abandon a behaviour that reliably changes their circumstances in favour of a newly taught response that produces no meaningful consequence.

This is where the concept of *behavioural opportunity* becomes particularly useful. Gallagher et al. (2026), in the TIBR/BRA framework developed in a different population and context, conceptualise behavioural opportunity as an environmental condition that makes behaviour possible, accessible and sufficiently safe to attempt. The framework further proposes that repeated opportunities for action, choice and reinforcement can support the development, generalisation and maintenance of alternative behavioural repertoires. This publication should not be treated as empirical evidence that these mechanisms have been established among autistic people or people with intellectual disabilities. Its relevance here is conceptual:

the environment can be designed not only to prevent behaviour, but to make alternative behaviour possible and effective.

Within the present framework, this suggests that intervention should ask not simply “*What alternative behaviour should we teach?*” but “What alternative behaviour can this environment realistically support and reinforce?” That clarification moves behavioural intervention away from teaching isolated skills and towards creating conditions in which those skills can become functional.

8.6 Safety, Restriction and the Prevention of Retraumatization

Safety remains a non-negotiable component of intervention where aggression or self-injury creates significant risk. There will be circumstances in which restrictive or emergency responses are necessary to prevent serious harm. A trauma-responsive framework should not obscure this reality or place practitioners in the position of choosing autonomy at the expense of immediate safety.

However, safety should be conceptualised at more than one level. Immediate physical safety is essential, but longer-term relational and psychological safety also matter. SAMHSA's trauma-informed framework places safety alongside trustworthiness, collaboration, empowerment, voice and choice, and explicitly emphasises the importance of resisting retraumatization (SAMHSA, 2014).

A restrictive intervention may therefore be necessary in the moment and still require critical review afterwards.

Post-incident review should consider not only whether the immediate risk was contained, but what conditions preceded the crisis, whether earlier communication or environmental adaptations could have altered the trajectory, whether the response introduced new restrictions, and how opportunities for autonomy and participation can be restored. Where restrictive interventions recur, the question should progressively shift

from *“How can we manage the next incident?”* towards *“What is the system learning from these incidents, and what needs to change to make recurrence less likely?”*

This is consistent with NICE recommendations concerning least-restrictive approaches, environmental modification, alternative behavioural repertoires and ongoing review of restrictive interventions (NICE, 2015).

The aim is not to portray restriction as inherently harmful. It is to ensure that restriction remains proportionate, purposeful, time-limited where possible, individually justified and subject to review, rather than becoming an increasingly permanent feature of the person's behavioural environment.

8.7 Changing Staff Behaviour and Organisational Practice

A trauma-responsive behavioural approach also requires attention to the behaviour of the people and organisations providing support. Staff behaviour is part of the environment in which the person's behaviour occurs. How staff present demands, interpret refusal, respond to early indicators of distress, provide reinforcement, structure transitions, communicate expectations and respond following incidents can influence subsequent behavioural patterns.

This does not mean attributing responsibility for challenging behaviour to individual staff members. Staff themselves operate within organisational contingencies, including staffing levels, policies, training, documentation requirements, risk-management procedures, workload and previous experiences of incidents. Research on organisational environments has demonstrated relationships between organisational characteristics and challenging behaviour, while research examining implementation of positive behaviour support in Irish residential services has identified organisational constraints, procedural difficulties and the pressures experienced by frontline staff as important influences on practice (Brady et al., 2025).

Consequently, staff training alone is unlikely to be sufficient if the organisational environment makes trauma-responsive behavioural practice difficult to implement.

A service may train staff to offer choices, for example, while maintaining routines that allow little genuine flexibility. It may teach staff to reinforce communication while failing to provide accessible communication systems. It may instruct staff to use proactive strategies while staffing levels make individualised support difficult. It may promote least-restrictive practice while organisational risk procedures implicitly reward avoidance and restriction.

The intervention must therefore operate at multiple levels simultaneously: person, staff, relationships, environment and organisation.

This is consistent with emerging social-ecological approaches to trauma-informed positive behaviour support, which conceptualise behavioural and trauma-responsive practice across personal, interpersonal, organisational and wider societal or cultural levels (Leif et al., 2026).

8.8 Evaluating What Actually Changed

The final requirement concerns evaluation. If intervention is intended to alter the interaction between person and environment, then evaluation must examine more than the frequency of the target behaviour.

Aggression and self-injury should continue to be measured carefully, particularly where risk is significant.

Frequency, duration, intensity, context and consequences remain important behavioural outcomes. However, they should be accompanied by measures of the person's behavioural repertoire and quality of life.

Relevant outcomes may include whether the person has gained more effective communication, increased opportunities for choice, greater participation in meaningful activities, improved access to community environments, stronger relationships, greater ability to refuse or negotiate, increased help-seeking, reduced

reliance on restrictive practices, and greater involvement in decisions about their support. NICE guidance similarly links behavioural intervention with quality-of-life outcomes rather than treating behavioural reduction as the sole indicator of success (NICE, 2015).

This is particularly important because a reduction in behaviour can be achieved through very different pathways. Fewer incidents because the person has developed safer alternatives is not equivalent to fewer incidents because the person's environment has become more restrictive.

Evaluation should therefore examine both what changed in the person and what changed around the person. Where possible, the assessment should also examine whether improvements generalise beyond the original intervention context. A person who learns to request a break with one familiar staff member has acquired a potentially useful skill, but the behavioural repertoire is more meaningful if that communication becomes effective across people, settings and circumstances. The same principle applies to autonomy, self-advocacy, emotional regulation and participation.

The intervention cycle should consequently remain iterative. Data should inform formulation; formulation should inform environmental change; environmental change should be evaluated; and outcomes should be used to revise the formulation. The objective is not to produce a static behaviour support plan but to establish a process through which the behavioural environment continually becomes more responsive to the person.

8.9 The Trauma-Responsive Behavioural Framework

Taken together, these principles can be conceptualised as the Trauma-Responsive Behavioural Framework (TRBF). *Figure 2* provides a visual representation of the framework, illustrating the iterative relationship between person and history, functional and contextual assessment, environmental formulation, communication and autonomy, alternative behavioural repertoires, reinforcement and participation, safety and risk review, outcome evaluation and ongoing reformulation.

Person and history → functional and contextual assessment → environmental formulation → communication and autonomy → alternative behavioural repertoires → reinforcement and participation → safety and risk review → outcome evaluation → reformulation.

The sequence should not be understood as strictly linear. Each component informs the others. A newly identified physical-health problem may alter the formulation. A change in communication may reveal that a behaviour previously understood as aggression was occurring in response to an unmet need. Increasing choice may alter the function of refusal. A change in staffing may alter behavioural patterns. An unsuccessful intervention may reveal that the assumed function was incomplete.

The model is therefore deliberately dynamic and hypothesis-driven. Its central unit of analysis is not the isolated behaviour but the interaction between person, behaviour and environment across time.

This also clarifies the role of trauma within the model. Trauma is neither the starting assumption nor the endpoint of formulation. It is one potential contextual variable that may influence how a person experiences relationships, demands, bodily boundaries, uncertainty, control and service environments. Its relevance must be established through individualised assessment rather than inferred from diagnosis or behavioural presentation.

Similarly, autonomy is not an additional ethical principle placed alongside behavioural intervention. It is part of the behavioural environment. Where people have meaningful opportunities to communicate, refuse, choose, negotiate and influence their circumstances, they have access to behavioural repertoires that may reduce the functional necessity of more harmful responses. Where those opportunities are absent, services should consider whether the environment is inadvertently narrowing the available behavioural repertoire.

The model consequently asks services to examine themselves as well as the person.

The central question is no longer simply:

“How do we reduce this behaviour?”

It becomes:

“What conditions are contributing to this behaviour, what safer alternatives can become effective, and what must change within the environment for those alternatives to work?”

This represents the central practical shift proposed by the framework. Behaviour remains observable, measurable and functionally assessable, but intervention is directed towards expanding behavioural possibilities rather than simply restricting behavioural expression. The person’s diagnosis and history are not treated as explanations for behaviour in themselves; instead, attention is directed towards understanding the environmental conditions within which behaviour occurs and identifying what can be changed to support the person.

Ultimately, trauma-responsive behavioural practice is concerned with creating environments in which people can experience safety without unnecessary restriction, autonomy without abandonment, structure without excessive control, communication without escalation, and participation without requiring compliance as the price of support.

The desired outcome is therefore not simply a person who exhibits fewer behaviours that services find difficult. It is a person who has more effective ways to communicate, more opportunities to make decisions, greater influence over everyday experiences, meaningful relationships and participation, and a safer and more personally significant quality of life. Behaviour reduction may be an important component of that process, but it becomes one indicator within a much broader conception of effective support.

***Note:** The framework presents a dynamic, iterative process in which functional behavioural assessment remains central while formulation and intervention incorporate developmental and service history, environmental conditions, communication, autonomy, alternative behavioural repertoires, participation, safety and ongoing outcome evaluation. The framework is conceptual and hypothesis-driven rather than an empirically validated intervention protocol.*

Table 5. Trauma-Responsive Behavioural Framework: From Formulation to Change

Framework stage	Core question	Key considerations	Potential targets for change
1. Person and history	Who is this person, and what has shaped their current experience?	Developmental history, communication, cognitive and adaptive abilities, health, relationships, learning history, preferences and previous service experiences	Accessible assessment, health needs, communication supports, continuity and recognition of individual history
2. Functional and contextual assessment	What variables are associated with the behaviour?	Antecedents, consequences, setting events, patterns across people, activities, environments and time	Behavioural contingencies, environmental triggers, consequences and conditions associated with successful engagement
3. Environmental formulation	What aspects of the environment may be contributing to the behaviour?	Demands, routines, transitions, sensory conditions, physical environment, staffing, predictability and available supports	Environmental modification, reduced unnecessary demands, increased predictability and improved environmental fit
4. Communication	How can the person communicate	Communication access, choice, refusal, negotiation, supported	Accessible communication, meaningful choice, supported

and autonomy	preference, refusal, distress or need for assistance?	decision-making and opportunities to influence the environment	refusal and greater participation in decisions
5. Alternative behavioural repertoires	What safer and more effective responses could achieve the same or related outcomes?	Functional communication, help-seeking, requesting breaks, negotiation, coping responses and other alternatives	Teaching and strengthening alternative responses that are effective within the person's actual environment
6. Reinforcement and participation	What makes alternative responses worthwhile and sustainable?	Social reinforcement, preferred activities, meaningful engagement, relationships, community participation and access to valued experiences	Increased access to meaningful reinforcement, social connection, participation and community life
7. Safety and risk review	What level of restriction or intervention is necessary to maintain safety?	Immediate risk, proportionality, least-restrictive responses, restrictive practices and potential longer-term effects	Risk reduction, least-restrictive practice, review of restrictions and development of safer alternatives
8. Outcome evaluation	Is behaviour changing, and is the person's life improving?	Behaviour frequency, duration and intensity alongside communication, choice, autonomy, participation, relationships and community access	Expansion of behavioural repertoire, increased autonomy and participation, reduced harmful behaviour and improved quality of life
9. Reformulation	What has been learned, and what needs to change next?	Response to intervention, changes in context, new behavioural information and unintended consequences	Revision of hypotheses, adaptation of environmental supports and continued individualised intervention

Note: The framework is conceptual and hypothesis-driven rather than an empirically validated intervention protocol. Functional behavioural assessment remains central throughout the cycle. The stages are iterative rather than strictly linear, with new information informing ongoing reformulation and adjustment of both individual and environmental interventions.

WHAT THIS LOOKS LIKE IN PRACTICE

The value of a conceptual framework ultimately depends on whether it changes practice. A trauma-responsive behavioural approach should therefore influence not only formal assessment and formulation, but everyday decisions about support. The examples below illustrate how similar presentations may lead to different formulations when behavioural function, communication, service history, environmental conditions, trauma-related possibilities and autonomy are considered together. They are hypothetical examples, not clinical case studies, and demonstrate application of the framework rather than prescribe specific interventions.

Table 6. Comparative Application of the Trauma-Responsive Behavioural Framework

Behavioural presentation	Conventional interpretation	Expanded formulation	Key assessment focus	Potential change
Aggression in groups	Behaviour requiring reduction	Interaction between demands, communication, sensory and relational context	What precedes escalation? How is refusal communicated? What follows?	Adapt demands; strengthen communication and participation

Self-injury at transitions	Dangerous behaviour to interrupt	Response shaped by transition demands, predictability, communication and contingencies	What changes at transition? Can the person anticipate, delay or refuse?	Increase predictability; teach alternatives; reinforce successful transitions
Personal-care refusal	Non-compliance or resistance	Possible communication of discomfort, preference or need for control	What does refusal communicate? Is meaningful choice available?	Increase choice; adapt care; support negotiation
Avoidance of professionals	Disengagement or lack of motivation	Behaviour potentially shaped by previous service experiences and perceived demands	What does professional contact predict? What happens during and after contact?	Increase predictability, choice, continuity and voluntary engagement
Escalation after unmet requests	Increasingly challenging behaviour	Learning that escalation is more effective than low-intensity communication	Are appropriate requests acknowledged? What produces environmental change?	Make appropriate communication effective; reinforce negotiation
Different behaviour across settings	Individual difference or severity	Behaviour influenced by environmental contingencies and opportunities	What differs between settings, people and activities?	Replicate protective conditions; modify problematic contexts
Behaviour following restriction	Incident requiring prevention	Reciprocal interaction between person, staff response and subsequent behaviour	What preceded restriction? What did each party learn?	Review proportionality; reduce restriction; strengthen prevention

Note: These examples illustrate application of the framework rather than predetermined behavioural functions. Functional behavioural assessment remains necessary to develop individualised hypotheses.

9.1 Aggression During Group Participation

Consider an adult attending a full-day programme who repeatedly becomes physically aggressive shortly before a particular group activity. A conventional formulation might identify the activity as an antecedent and aggression as escape-maintained behaviour, leading to an intervention focused on increasing participation or reinforcing attendance. Functional assessment remains essential, but the broader framework asks why the activity may be difficult and what alternatives are available.

Assessment might identify communication or cognitive demands, sensory or social overload, previous difficulties in similar activities, or the absence of a reliable way to request a break or decline participation. Previous service responses may also be relevant if attempts to communicate discomfort or refusal have historically been ineffective. These possibilities require examination through observation, consultation and functional assessment rather than assumption.

Intervention might consequently include accessible information, a reliable break request, sensory adaptations, reduced response effort, meaningful choice and reinforcement for alternative communication. Staff would also need to respond consistently when communication occurs. Teaching a person to request a break while continuing to ignore the request changes the repertoire without changing the contingency that may have made aggression effective.

The objective therefore extends beyond participation without aggression to participation alongside safer and more effective ways to communicate, decline and negotiate. Behavioural reduction remains important, but should be interpreted alongside communication, autonomy and participation (NICE, 2015).

9.2 Self-Injury During Transitions

Consider an individual who repeatedly engages in self-injury when transitioning from a highly preferred activity to another scheduled task. Rather than treating the problem primarily as non-compliance with transition demands, assessment would examine predictability, understanding of when preferred activities will return, the demands of the next activity, previous transition experiences and whether the person can request additional time or assistance. Physical-health variables should also be considered (de Winter et al., 2011).

Intervention might include advance warning, accessible information, predictable transition routines, functional communication for requesting additional time and meaningful choices about what happens next. Where appropriate, the subsequent activity or response effort could also be modified.

The intervention would remain hypothesis-driven. If predictability produced little change, the formulation would need reconsideration rather than simply intensifying the transition programme. The transition is therefore treated as a functional context to investigate, not a behavioural problem whose solution is automatically increased compliance.

9.3 Refusal of Personal Care

An adult living in residential care repeatedly refuses personal care. Although refusal may be documented as non-compliance, the behaviour does not establish whether the person is experiencing discomfort, sensory sensitivity, concerns about privacy, communication difficulty, a preference for different timing or methods, or a history in which attempts to refuse have been ineffective.

Assessment should establish what is being refused, under what conditions, whether particular staff or aspects of care are involved, whether lower-intensity refusal signals occur first, and what happens when they do. Intervention might include different timing, preferred staff where feasible, smaller task components, sensory adaptations and accessible opportunities to communicate consent, refusal and readiness.

Where care cannot reasonably be declined because of essential health or safety considerations, meaningful influence may still be possible over how, when, where, with whom or through which communication method it occurs. Supported refusal is therefore both an ethical and behavioural objective. Teaching a different way to say no is insufficient if the new response does not actually influence the environment.

9.4 Avoidance of Professional Contact

An adolescent or adult may repeatedly miss appointments, withdraw when unfamiliar professionals arrive, refuse assessments or become distressed when clinical support is introduced. Such behaviour may be described as disengagement or resistance, but for someone with extensive service involvement, professional contact may itself have acquired behavioural significance.

Assessment should examine what professional contact has historically predicted: demands, unwanted interventions, unfamiliar people, loss of control or communication difficulties. Consistency of staffing, accessible information, additional processing time, control over aspects of the environment and a reliable means of requesting a pause may then become relevant intervention variables.

Research on autistic adults' experiences of mental-health services highlights difficulties involving communication, service fit, understanding and therapeutic relationships, alongside the importance of collaboration and empowerment (Brede et al., 2022). This does not establish that service difficulties cause avoidance, but supports viewing engagement as a relationship between person and service rather than simply an attribute of the service user.

From a behavioural perspective, these changes modify antecedent conditions and response effort; from a trauma-responsive perspective, they may increase predictability, safety and control. The approaches therefore converge without requiring trauma to be assumed as the cause.

9.5 Learning From Crisis Rather Than Ending With Crisis Management

Following significant aggression or self-injury, intervention should not necessarily end with incident documentation and containment. Once immediate safety has been restored, the episode can provide information about the behavioural system that preceded it.

Review might consider changes in routine, staffing, medication, sleep, physical health, communication, relationships, demands and access to preferred activities, alongside what the person attempted to communicate and what consequences followed. Where restrictive intervention occurred, its immediate necessity and longer-term effects should both be considered.

This does not imply that the service caused the incident or that restriction was inappropriate. A response can be necessary in the moment while still providing information about what might reduce recurrence. The clarity is between incident management and behavioural intervention: the former addresses immediate risk; the latter addresses conditions that influence future probability.

The incident therefore becomes data about the behavioural system, rather than simply evidence about the individual's behaviour.

9.6 When Behaviour Changes: What Actually Changed?

Suppose aggression decreases following a move to a quieter environment, greater staffing consistency, improved communication and increased access to preferred community activities. A narrow evaluation might attribute improvement to the behaviour support plan; a broader evaluation recognises that several environmental variables changed.

The converse is equally important. Aggression may decrease because the person is increasingly isolated, more heavily supervised and given fewer opportunities to communicate disagreement. Behavioural data may appear positive while the person's behavioural repertoire and quality of life have narrowed.

The relevant question is therefore not simply whether behaviour decreased, but what changed in its place. Meaningful evaluation should consider communication, autonomy, participation, relationships, community access and restrictive-practice use alongside behavioural frequency. Behavioural quietness should not automatically be interpreted as behavioural improvement.

9.7 Two People, Similar Behaviour, Different Formulations

Consider two adults who both become physically aggressive when staff approach them with requests.

For the first, assessment identifies untreated pain, poor sleep and a task requiring substantial physical effort. Addressing these variables and adapting the task reduces aggression. For the second, aggression occurs primarily with unfamiliar staff and physical proximity. The person has a history of placement changes and restrictive interventions, while lower-intensity attempts to refuse or request space have historically been ineffective. Intervention therefore focuses on staff consistency, predictable interaction, supported refusal, personal-space control and accessible communication.

The behavioural topography is similar. The formulations are not.

The example illustrates why diagnosis, topography, trauma history or a particular antecedent cannot determine intervention independently. The appropriate intervention emerges from the relationship between person, behavioural function, environment and history. Systematic reviews similarly emphasise the multifactorial nature of aggression and challenging behaviour among people with intellectual disabilities (van den Akker et al., 2021; Reyes-Martín et al., 2022).

9.8 What Changes for the Practitioner?

Taken together, these examples demonstrate that the framework is not another intervention package. It changes the questions practitioners ask and the variables they are prepared to examine and modify.

Practitioners must establish what behaviour accomplishes, what precedes and follows it, what the person has experienced previously, what the current environment requires, what alternatives are available, and whether those alternatives actually influence the environment. They must also consider whether communication, refusal, choice and participation are genuinely available, how staff and organisational responses contribute to behavioural patterns, and what can be changed without compromising necessary safety. This does not replace behavioural assessment, clinical assessment or risk management. It broadens them.

The practical shift is therefore from behaviour management towards behavioural ecology. Intervention remains concerned with reducing aggression and self-injury where these create risk, while also changing the conditions under which high-risk behaviour becomes necessary, effective or likely. The aim is to increase effective safer repertoires and ensure that those repertoires produce meaningful outcomes within the person's actual environment.

The central question is consequently not whether the person has become easier to support, but whether they have gained more effective ways to communicate, greater influence over their environment, safer alternatives to high-risk behaviour and greater opportunity to participate in a meaningful life.

IMPLICATIONS FOR SERVICE DESIGN

If behaviour develops within an environment, trauma-responsive behavioural practice cannot remain solely an intervention delivered to an individual. Where people have sustained contact with health, education, disability, mental-health, social-care, day-service or residential systems, those systems form part of the behavioural ecology in which behaviour occurs. The implications therefore extend beyond practitioner technique to the structures, routines, expectations and relationships through which support is organised. Trauma responsiveness should consequently be understood as an organisational responsibility, rather than a training topic added to existing practice.

This does not mean that organisations cause behaviour that challenges, or that environmental explanations replace individual assessment. Physical health, communication, developmental factors, behavioural contingencies and individual learning histories remain essential. Rather, where assessment identifies environmental or organisational variables as relevant, those variables should become legitimate targets of intervention. NICE guidance similarly emphasises consideration of environmental factors, communication, choice, structure, previous interventions and the role of services, staff and carers in behaviour that challenges (NICE, 2015).

The organisational question is therefore not simply whether staff have been trained to respond differently, but whether the service has been designed so that different responses are possible.

10.1 From Staff Training to Organisational Conditions

Staff training remains important, but training alone cannot establish trauma-responsive behavioural practice. Practitioners may understand the importance of predictability, communication, choice and environmental modification while having limited control over appointment schedules, staffing, routines, communication resources or organisational procedures.

Research concerning Active Support illustrates that staff practice can influence opportunities for people with intellectual disabilities to engage in meaningful activity and participate in everyday life (Flynn et al., 2018). Research on Irish residential services similarly identifies organisational constraints, procedural difficulties and pressures on frontline staff as barriers to effective positive behaviour support (Brady et al., 2025). Staff behaviour is therefore not simply the mechanism through which an intervention is delivered; it is part of the

intervention environment.

Organisations should consequently examine whether their policies, staffing structures, supervision, communication systems and risk procedures enable the practices they expect staff to implement. This also requires attention to staff experience. Repeated exposure to aggression, self-injury or crisis may understandably increase emphasis on immediate safety, and without adequate supervision and reflective support, risk management can become the dominant framework through which both the person and their behaviour are understood. Creating conditions for reflective, responsive practice is therefore an organisational responsibility as well as an individual professional skill.

10.2 Designing for Autonomy Within Necessary Structure

Organisations should examine how their routines distribute control. The timing of activities, access to breaks, opportunities to communicate disagreement, notice of changes and the extent to which a person can influence their support all have behavioural consequences.

This requires a distinction between supporting a person to make decisions and making decisions for them. People may require accessible information, communication supports, additional processing time or assistance from familiar supporters without those supports diminishing autonomy; in many cases, they make autonomy possible. Research examining autonomy from the perspectives of people with intellectual disabilities indicates that it can be constrained when decisions are routinely made without meaningful involvement, while research on self-determination identifies choice-making, supported decision-making, self-advocacy and environmental conditions as relevant to increasing self-determination (Sheerin et al., 2026; Kuld et al., 2023).

The organisational task is therefore not to maximise choice without boundaries, but to identify where meaningful choice is possible and ensure that it is not unnecessarily withheld. This is particularly important where substantial structure is required. Predictability can support participation, but structure becomes restrictive when organisational convenience determines the routine while leaving little opportunity for preference, negotiation or influence.

10.3 Necessary Limits, Restriction and Supported Refusal

Autonomy does not eliminate legitimate safety or professional responsibilities. There will be circumstances in which a refusal requires further assessment or action and situations in which restrictive or emergency intervention is necessary to prevent significant harm. The important note is between necessary limits and unnecessary restrictions. Even when an activity or safety procedure cannot reasonably be avoided, the person may retain influence over its timing, location, sequence, communication method, staff member involved or degree of assistance. Restrictions introduced during periods of risk should likewise remain subject to review as circumstances change.

Supported refusal should form part of everyday practice. Refusal may communicate discomfort, disagreement, uncertainty, pain, sensory overload, a desire for privacy or a preference for a different approach. Where lower-intensity communication is repeatedly unsuccessful while escalation reliably changes the environment, the behavioural system may inadvertently favour escalation. Conversely, when refusal and requests for assistance produce appropriate responses, lower-risk alternatives become more effective. Supported refusal does not mean that every refusal results in withdrawal of a demand; it means that communication of refusal has behavioural significance and should be responded to before escalation becomes necessary.

10.4 The Environment as an Object of Behavioural Assessment

The physical and social environment should be assessed with the same seriousness as individual behavioural variables. Relevant factors may include noise, lighting, crowding, waiting periods, staff movement, unfamiliar people, access to quiet spaces, preferred activities, community access, privacy and the organisation of transitions (NICE, 2015).

The purpose is not to determine whether an environment is simply good or bad, safe or unsafe, but to examine its functional effects. An environment may make communication easier or harder, increase or decrease response effort, provide or restrict access to reinforcing experiences, and create different consequences for refusal, participation or escalation. These questions do not imply that every preference can be accommodated or every demand removed. They provide a means of distinguishing between necessary environmental structure and unnecessary environmental burden.

Where support is delivered repeatedly over months or years, routines that appear ordinary to staff may nevertheless constitute the conditions of everyday life for the person receiving support. Service design should therefore remain part of behavioural formulation.

10.5 Incident Management as Organisational Learning

Responses to aggression or self-injury should provide opportunities for organisational learning rather than functioning solely as endpoints of risk management. Following an incident, services should consider changes in staffing, routine, sleep, medication, physical health, communication, relationships, demands and access to preferred activities, alongside what the person may have attempted to communicate and what consequences followed the behaviour.

Where restrictive intervention was necessary, review should consider both its immediate necessity and whether the conditions that made it necessary are likely to recur. Repeated aggression around particular transitions, for example, may indicate a need to redesign transition procedures; self-injury following communication breakdown may indicate a need to strengthen communication support; and escalation following particular staff interactions may warrant examination of those interactions.

This is not an exercise in assigning blame, but in identifying modifiable variables. The incident therefore becomes data about the system as well as the individual. A service that repeatedly manages the same crisis without examining the conditions surrounding it may become increasingly proficient at containment without becoming more effective at prevention.

10.6 Documentation, Continuity and the Behavioural Identity

Documentation is another mechanism through which organisational environments can shape future interactions. Descriptions such as *aggressive*, *non-compliant*, *attention-seeking*, *manipulative* or *difficult to engage* may begin as shorthand for observed behaviour but can become treated as characteristics of the person. Once embedded within records, such descriptions may influence referrals, staffing decisions, risk assessments and the expectations of professionals who have never previously met the individual. Documentation should therefore preserve the difference between behavioural description and behavioural identity.

Compare:

“John is aggressive and non-compliant with personal care.” with:

“John has declined personal care on four occasions this week, particularly when care is offered by unfamiliar staff or without advance notice. He has accepted care when offered by familiar staff, after being given additional processing time and the opportunity to choose between two times.”

The second description preserves context, variability and conditions associated with successful engagement, leaving the formulation open. This becomes particularly important across service transitions, where continuity should involve the transfer of more than diagnoses and incidents. Records should communicate how the person communicates, indicates refusal, participates successfully, responds to different environments, and which strategies, relationships and forms of support have been effective. In this sense, good documentation can function as an intervention against behavioural narrowing.

10.7 Measuring Whether the Person Is Living Better

Service effectiveness should also be evaluated against more than incident frequency. Attendance, programme completion, medication use and restrictive-practice frequency provide useful information, but none establishes whether a person's life has improved. Outcome evaluation should therefore consider communication, meaningful choice, participation, relationships, community access, self-advocacy and opportunities to influence everyday decisions. Evidence concerning day-service provision similarly identifies communication, engagement, relationships, empowerment and community integration as important dimensions of effective support (Belsey & Harrison, 2026).

This creates a fundamental distinction between behavioural reduction and behavioural improvement. A reduction in aggression because the person has developed safer communication, greater autonomy and more effective ways of participating represents something fundamentally different from a reduction achieved through isolation, increased supervision or removal of meaningful activities. Although the observed frequency of behaviour may be the same in both cases, the outcomes are not equivalent because the conditions surrounding the behaviour and the opportunities available to the person have changed differently.

Services should therefore evaluate not only whether high-risk behaviour has reduced, but also what has become possible in its place. Relevant outcomes may include increased communication, effective supported refusal, broader participation, reduced reliance on restrictive practices, greater community access and increased influence over everyday decisions. The organisational question is consequently not simply whether the person is behaving better, but whether the person is living better.

10.8 From Service Delivery to Environmental Design

Taken together, these implications require a shift in how organisations conceptualise their role. Services are not neutral containers in which interventions are delivered. For people who spend substantial portions of their lives within them, services are environments in which communication is reinforced, relationships are formed, expectations are learned, autonomy is practised or constrained, and behavioural repertoires can expand or narrow.

The organisation therefore becomes both context and intervention target. This does not remove the need for individual functional assessment, behavioural measurement, physical and mental-health assessment or targeted intervention. Rather, it recognises that relevant variables may exist at multiple levels and that intervention should occur wherever those variables can meaningfully be changed.

This reframes service design as the design of behavioural opportunity. A service may need to maintain structure, manage legitimate risks and place necessary limits, but these responsibilities do not preclude meaningful choice, communication, participation or autonomy. Where such opportunities can safely be provided, they should be treated as components of effective behavioural support rather than optional additions to it.

The central question for service design therefore becomes: does the service adapt sufficiently to the person, or is the person continually required to adapt to the service? Trauma-responsive behavioural practice requires organisations to examine their own contribution to the behavioural environment and to design conditions in which safer communication, meaningful choice, participation, autonomy and behavioural alternatives are genuinely possible.

DISCUSSION: WHEN THE SYSTEM BECOMES PART OF THE BEHAVIOURAL CONTEXT

The central proposition of this paper is that the service environment warrants systematic consideration within behavioural formulation. For people with autism, intellectual, cognitive or developmental disabilities who experience aggression, self-injury or other behaviours that challenge, immediate antecedents and consequences may not always provide a sufficient account of the behavioural context. Functional assessment remains

essential, but its explanatory reach may sometimes need to extend across developmental and service history, particularly where repeated interactions with health, education, disability, behavioural and social-care systems have shaped expectations, communication, relationships and opportunities for participation.

The concept of behavioural ecology is proposed to capture this wider unit of analysis. It refers to the dynamic relationships among behaviour, learning history, communication, physical and social environment, interpersonal interactions, reinforcement contingencies and opportunities for autonomy across the contexts and periods in which behaviour develops and changes. This extends rather than replaces functional behavioural analysis: the immediate function of a behaviour remains an empirical question, while behavioural ecology draws attention to the broader environmental and temporal conditions that may influence that function.

11.1 Trauma as Context, Not Conclusion

A trauma-responsive formulation provides one possible lens through which these broader patterns can be considered. Evidence indicates that people with intellectual and developmental disabilities may experience trauma and multiple forms of adversity (McNally et al., 2021; Cook & Hole, 2021), while autistic people may encounter difficulties accessing appropriate mental-health support and services that do not adequately accommodate their communication and support needs (Brede et al., 2022).

These findings do not establish that aggression or self-injury is caused by trauma, nor that service contact is inherently harmful. Trauma history should therefore remain a formulation variable rather than a predetermined explanation. Its relevance depends on whether experiences such as threat, loss of control, unpredictability, coercion or repeated unsuccessful communication can be linked, through assessment, to the person's current behavioural environment.

This position avoids two forms of reductionism: treating trauma as irrelevant to behavioural assessment, or treating trauma as the explanation whenever a trauma history exists. The value of a trauma-responsive behavioural approach lies precisely in maintaining this distinction. Trauma may inform formulation, but functional assessment remains necessary to establish how behaviour operates for the individual in their current context.

11.2 Service History as Behavioural History

The paper's central conceptual contribution is the proposition that service history may become part of behavioural history. The distinction between evidence and hypothesis is particularly important here. Established literature supports the relevance of previous learning, environmental contingencies, service context, staff responses, autonomy and communication to behavioural formulation. What remains to be established is whether repeated service interactions, considered cumulatively across time, reliably influence subsequent behavioural expectations and the functional significance of later service cues.

This is not a claim that service experience determines subsequent behaviour. Rather, repeated contingencies may shape behavioural expectations and the availability of behavioural alternatives. Where communication has repeatedly failed to produce meaningful environmental change, escalation may become relatively more effective than lower-intensity responses. Conversely, consistent opportunities to communicate, refuse, negotiate and access meaningful reinforcement may support broader and safer repertoires.

The conceptual extension is therefore temporal as well as functional. The proposed model predicts that, where service history is behaviourally consequential, prior patterns of interaction may alter subsequent responding to comparable service cues. This is a testable proposition rather than a conclusion. Longitudinal and within-person research would be needed to determine whether service-history variables predict later behavioural expectations, whether those expectations alter responses to current contingencies, and whether changing the relevant contingencies changes subsequent behaviour.

11.3 Autonomy, Repertoire and the Meaning of Improvement

Autonomy is relevant to the framework not only as a rights-based outcome but also as a potential behavioural

variable. Opportunities to communicate preferences, make meaningful choices, refuse, negotiate and influence aspects of everyday life alter the contingencies available to the person. Evidence concerning self-determination and autonomy among people with intellectual disabilities supports the importance of environmental opportunities for participation and decision-making (Kuld et al., 2023; Sheerin et al., 2026).

This has implications for how behavioural improvement is defined. A reduction in aggression or self-injury accompanied by increased communication, autonomy, participation and access to safer behavioural alternatives represents a different outcome from an equivalent reduction achieved primarily through isolation, increased supervision or removal of meaningful activities. Behavioural frequency alone cannot distinguish between these outcomes.

The relevant issue is therefore not simply whether a high-risk behaviour has decreased, but whether the person's behavioural repertoire and opportunities for participation have expanded. This reframes improvement from the suppression of an undesirable response towards the development of a wider range of effective ways to communicate, participate and influence the environment.

11.4 The System as Context and Intervention Target

The framework also challenges a purely individualised conception of behavioural intervention. Where organisational routines, staffing arrangements, communication systems, environmental demands or staff responses contribute to the conditions surrounding behaviour, changing those variables may form a legitimate part of intervention alongside individual behavioural strategies.

This does not make the environment the sole cause of behaviour or remove the need for individual intervention. It recognises instead that behaviour is relational and contextual: staff behaviour is shaped by organisational contingencies, while staff responses simultaneously alter the consequences available to the person (Olivier-Pijpers et al., 2019; Brady et al., 2025). The service can therefore occupy two positions at once: it is part of the behavioural context and an intervention target.

This is particularly significant in long-term services, where organisational arrangements may become part of everyday life and where repeated changes in communication, predictability, choice, reinforcement or participation can accumulate. The implication is not that every environmental variable should be changed, but that potentially modifiable environmental variables should be considered alongside individual ones when they are functionally relevant.

11.5 Implications for Research

The framework generates several priorities for future research. Most importantly, longitudinal and repeated-measures studies are needed to examine whether identifiable features of cumulative service experience are associated with subsequent changes in behavioural expectations and responding to comparable service cues. Such studies should distinguish service-history variables from current antecedents, consequences, health variables and other relevant setting events. Research should also examine whether changes to service contingencies produce corresponding changes in communication, refusal, participation, behavioural repertoire and high-risk behaviour.

Outcome measurement should extend beyond frequency or intensity of aggression and self-injury to include communication, autonomy, participation, relationships, community access and use of alternative behavioural repertoires. The perspectives of people themselves should also be incorporated wherever possible, particularly regarding their experiences of support, restriction, refusal, choice and professional relationships.

Such research is necessary to establish which elements of the proposed framework are empirically supported, for whom and under what conditions. In particular, evidence is needed to determine whether the temporal pathway from cumulative service experience to behavioural expectations to subsequent responding is observable and replicable. Until that evidence exists, the framework should be understood as a conceptual synthesis and set of testable propositions rather than an empirically validated intervention model.

11.6 Reconsidering the Unit of Analysis

Taken together, these arguments suggest that the unit of analysis may sometimes need to extend beyond the isolated behaviour to the relationship between person and environment across time. This does not diminish the importance of individual behaviour or functional analysis. Instead, it situates those analyses within the wider behavioural ecology in which learning, communication, reinforcement, relationships and autonomy develop.

This broader perspective also changes the meaning of the phrase “when support becomes part of the problem.” The phrase is not intended to suggest that services are inherently harmful or that environmental explanations should displace individual responsibility or assessment. Support can provide safety, stability, communication, relationships and opportunities that would otherwise be unavailable. The proposition is more specific: because support is part of the environment, it is also subject to behavioural and relational analysis.

The resulting framework therefore retains the empirical discipline of behavioural assessment while extending its temporal and ecological reach. It brings trauma, autonomy, service history and organisational context into formulation without allowing any one of them to become a predetermined explanation. Where behaviour emerges through the interaction between person and environment, sustainable change may require changing the conditions around behaviour as much as changing the behaviour itself.

CONCLUSION: FROM MANAGING BEHAVIOUR TO CHANGING THE CONDITIONS AROUND IT

This paper has reconsidered how aggression, self-injury and other behaviours that challenge may be understood among autistic people and people with intellectual, cognitive or developmental disabilities, particularly where individuals have extensive histories of service involvement. Its central argument is not that behaviour should be ignored, that trauma provides a universal explanation for distress, or that behavioural approaches are incompatible with trauma-responsive practice. Rather, behaviour may be understood more fully when the person, their behavioural history, communication, physical and social environment, service experiences and opportunities for autonomy are considered together.

Behaviour is observable, but its meaning is not necessarily self-evident. Aggression, self-injury and refusal may serve different functions across individuals and environments, making functional assessment, behavioural measurement and attention to antecedents and consequences essential to formulation. The contribution of the framework proposed here is not to replace these established methods, but to broaden the context in which they are applied. For individuals with extensive service histories, that context may include repeated interactions with the systems through which support has been provided.

This leads to the paper's central proposition: service history may become part of behavioural history. Repeated experiences of being assessed, directed, supported, restricted, transferred or responded to may influence what subsequent environments and interactions predict for an individual. This does not establish that services cause behaviour, nor does it imply that restrictive intervention is inherently inappropriate. It suggests instead that where behavioural patterns occur repeatedly within particular service environments, those environments should themselves be available for behavioural examination.

The framework therefore shifts the unit of analysis towards the relationship between person and environment across time. Individual characteristics, behavioural contingencies and immediate environmental conditions remain important, but so too may be the interactional patterns that develop between people and the services supporting them. Intervention should consequently be directed towards whichever variables are shown through assessment to contribute to the occurrence or maintenance of behaviour, whether these involve communication, physical or sensory conditions, reinforcement, staff responses, organisational practices, autonomy or other aspects of the environment.

Autonomy is an important part of this formulation. Requiring substantial support does not remove a person's preferences, agency or need for influence over their own life. Opportunities to communicate, refuse, negotiate,

choose and request assistance may also expand the behavioural repertoire available to the person. Where lower-risk forms of communication reliably influence the environment, they may become more effective alternatives to higher-intensity responses. Conversely, where communication and refusal are repeatedly ineffective, escalation may become relatively more effective for achieving environmental change. These relationships remain hypotheses to be assessed rather than assumptions about why any particular person behaves as they do.

This perspective also changes how behavioural success is understood. Reducing aggression or self-injury may be essential where significant risk is present, but reduction alone does not establish that an intervention has improved the person's life. Behaviour may decrease because communication, autonomy and environmental fit have improved, or because opportunities for activity, choice and participation have been narrowed. Meaningful evaluation therefore requires attention to what becomes possible alongside behavioural change, including safer communication, participation, relationships, autonomy and access to alternative behavioural repertoires.

The framework should nevertheless be interpreted cautiously. It is a conceptual, hypothesis-driven proposition for practice and research rather than an empirically validated intervention model. The evidence concerning integrated trauma-responsive behavioural practice across autistic people and people with intellectual and developmental disabilities remains developing, and the specific proposition that cumulative service experience may become an important component of behavioural formulation requires further empirical investigation. Future research should therefore test these relationships across populations, settings and time rather than assume them.

The phrase “*when support becomes part of the problem*” should similarly not be read as an accusation against services or practitioners. Support systems exist because people may have substantial and legitimate support needs, and practitioners work within complex clinical, organisational and safety constraints. The proposition is more precise: support is itself part of the environment and can therefore shape behaviour in unintended ways. A routine may provide predictability while limiting choice; a risk-management strategy may prevent immediate harm while increasing dependence; and a behaviour programme may reduce incidents without increasing participation. Conversely, changes to communication, staffing, routines, environmental conditions and opportunities for choice may alter the same behavioural environment in ways that support both safety and autonomy.

The resulting argument is therefore not a choice between behavioural science and trauma-responsive practice, or between safety and autonomy. It is an argument for bringing these perspectives into the same formulation while retaining appropriate boundaries between evidence, hypothesis and interpretation. Behavioural science provides the empirical discipline required to identify contingencies and evaluate change; trauma-responsive practice broadens attention to history, safety, power, relationships and the possibility of retraumatisation; and person-centred and rights-based approaches clarify that the purpose of support extends beyond behavioural manageability towards meaningful participation and influence.

Ultimately, when behaviour emerges through the interaction between person and environment, sustainable behavioural change may require changing the conditions around behaviour as much as changing the behaviour itself. For people with extensive service histories, this means recognising that the environments intended to provide support may become part of the learning history within which behaviour develops and changes. The task is therefore not simply to make behaviour less difficult for services, but to create conditions in which safer communication, meaningful choice, participation and autonomy are genuinely possible.

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