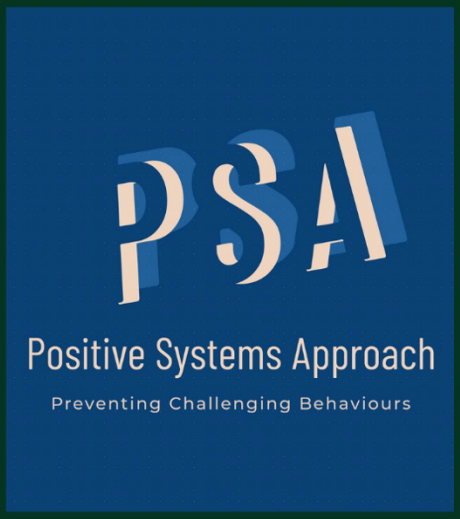
USING APPLIED BEHAVIOUR ANALYSIS WITHIN A POSITIVE SYSTEMS APPROACH TO SUPPORT PERSONS WITH BEHAVIOURAL CHALLENGES



Dr. Bob Carey

Terry Kirkpatrick

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Chapter 1: Introduction

In this introductory chapter, we wish to acquaint the readers with our background. Dr. Carey has worked as a Clinical Psychologist with over four decades of professional experience. Throughout his extensive career, he has contributed to various institutional, family and community settings, offering support to both children and adults with developmental disabilities and mental health challenges. His formal training as a Clinical Psychologist took place at Western University in London, Ontario, with a specialization in applied behaviour analysis and developmental disabilities. Following the completion of his Ph.D. and subsequent registration as a Clinical Psychologist in Ontario, his initial employment was as a consulting Psychologist at the now-closed Oxford Regional Centre in Woodstock, Ontario.

Oxford Regional Centre, along with other "Schedule 1" institutions in Ontario, eventually shuttered its doors as part of the deinstitutionalization movement that emerged during the 1970s and 1980s. It is worth noting that his role at that time was unique; it was not primarily intended to provide clinical consultation to the staff at Oxford Regional Centre. Instead, he worked as part of a "Community Services" team aimed at facilitating the transition of individuals from institutional settings to community placements, such as group homes, throughout Southwestern Ontario. He wholeheartedly embraced this role due to his strong belief in community engagement and deinstitutionalization.

Terry Kirkpatrick first met Bob Carey at the Oxford Regional Centre in Woodstock. Terry was working in the Social Work Department and Bob in the Psychology Department. Both had strong backgrounds in Applied Behaviour Analysis and had much in common from the beginning. Terry had recently graduated from the Master of Education program at the Ontario Institute for Studies in Education, and was considering continuing his studies there for the Doctor of Education degree, focusing on Special Education and Adult Education. Before the Ontario government developed a comprehensive plan for the closing of 6 institutions and downsizing of several others, Terry had already placed enough individuals in communities in the Southwest Region to have closed a complete residence at that time and had a great deal of experience in how to make these transitions successful. He prided himself on ensuring that all clients were successful in making the transition from institution to community. Terry drew on his experience earlier in his career, teaching residents of Rideau Regional Centre at Algonquin College, Lanark Campus (in Perth, Ontario), how to live (semi-) independently in the community, and his time as an Adult Protective Service Worker, working with clients to preserve their residency and quality of life in Cambridge, Ontario. He was consequently thrilled, then, to be assigned the duty of Placement Coordination with responsibility to the Waterloo Regional Office of the Ministry of Community and Social Services. In this initiative, Terry was responsible for the planning and implementation of moves from multiple institutions in the Southwest Region of Ontario of 108 men and women. The “window” to accomplish these discharges from start to finish, was actually 8 months. Given this narrow time frame, several community services organizations were challenged. Some organizations were eliminated from direct involvement for a variety of reasons, some organizations were literally created in areas where there had previously been only an association, with no direct services, and some organizations were heavily depended upon for leadership and partnership to make

this work. So there was involvement from government program supervisors, local advocates and advocacy organizations, community leaders, members of governing boards and committees, senior staff and direct service personnel at the front line, all working collaboratively to ensure success. In the region where Terry was responsible, all 108 people were successfully transferred from institution to community living and remained there five years later. Alas, this was not the experience of several other regions (see below).

After successfully accomplishing this mission, Terry returned to Oxford Regional Centre, this time to the Community Services Department. The interest at that time was to repair and support what was seen by most Community Services Department members, as insufficiently prepared and/or unsuccessful placement experiences. Failure rates (meaning clients placed in communities, but returned to Oxford Regional Centre within the year or two following placement) ranged from 12% to greater than 25%. One agency in particular had a 50% failure rate for their placements – 4 of 8 people placed had already been returned to Oxford Regional Centre within the first year after placement.

Most agencies had very low levels of training in effective behaviour management strategies, and some had very strong ideological postures that gravitated against taking intensive efforts at managing challenging behaviour (such as offensive personal habits like fecal smearing, spitting, public urinating, screaming, swearing, and other "unsocialized" habits; aggressiveness such as hitting, self-harm, kicking, breaking and throwing objects, biting, etc.); and a host of behaviours indicative of distress (such as crying and sobbing, refusal to eat, withdrawal, refusal of self-care or participation in recreational activity, etc.). Terry noticed in his work that, in such "trouble spots", there was often "system level" obstacles preventing successful transition of individuals into the community. In some cases community advocates protested against what they claimed were "dehumanizing" or "authoritarian" methods being used, without being particularly precise about what these acts might be defined as; one board of directors had allegedly made it clear to staff that, if the staff touched a resident, even to redirect them or prevent them from either eloping from a safe location into a dangerous location, they could be fired. Later staff expressed fear, and in one example, a staff member was reported to have been seen to be running away from a resident who was apparently chasing them with a glass of water in hand. The staff member was convinced the resident was going to splash them with the water. In today's world, it may seem strange, but criteria for admission to almost any residence in virtually any community in those days included the phrase "no behaviour problems".

To summarize the points Terry made at that time:

- Approximately 50% of residents of ORC in 1987 were older than 45; most of those older than 50, and had, therefore a lengthy period of time becoming accustomed to an institutional life. Choice was limited, and routines pretty regimented. It would be a major culture shock to move to smaller, more intimate, more demanding community living; in addition, most would be strangers to the others into whose company each client might move. Community agencies generally were demanding that new admissions be for people under 45, and "without behaviour problems".
- Demission "failures" or "placement failures" between 1980 and 1986 were nearly double that of other age groups at that time; this despite the finding that the over-45 groups generally had relatively higher intellectual ability and life skill functioning, and the relatively lower incidence of personality disturbances and behaviour disorders perceived in that group. In addition, of new admissions of clients to ORC (even while attempting to downsize), people over age 50 constituted about 1 in 5.
- During those years, only 5 people from ORC over the age of 50, were able to move to community residences.
- Most community agencies reported that they were not planning expansions specifically for seniors, and professed concern for the aging populations currently in their own jurisdictions.
- There was a perceived inadequacy of adapted equipment, appropriate materials and supports, prosthetic devices, and physical environments adaptable to those with mobility problems, as well as activities and recreation suitable for a more "retirement" style of living.
- There is a need for combinations of behavioural, cognitive, dynamic, ecological and educational interventions, in conjunction with medical/pharmacological assistance, administered by multi- or trans-disciplinary teams of direct-care staff and consultants.
- More needed to be known about those being served, with respect to personality, trauma history, expectations, habits and routines, and the "life lived".
- There can be too much emphasis on changing the individual through educational and behaviour-management programming without regard to the ecology and other non-client environmental influences on lifestyle and well-being.

- There was a perceived lack of program accountability and feedback mechanisms…very few of the elements…have been implemented anywhere in Ontario (McWhorter and Kappel (NIMR) – Mandate for Quality, Volume II Missing the Mark: An Analysis of the Ontario Government's Five Year Plan, p. 25)
- Disagreements upon admission of clients to institution previously supported in community agencies often centred around inconsistent degrees of commitment toward working with clients with persistent, obnoxious or disturbing behaviour, non-compliance, or a variety of mildly threatening aggression such as slapping, hitting or kicking others. Area Office personnel might not support the goal of retaining people in their home communities and might show a lack of accountability to the individual being supported.
- Institutions COULD be a "cause" of people having anomalous behaviour, but more often people were arriving at institutions because their "challenging behaviour" was not being managed in community living. We simply were not delivering services and supports for those who didn't comport themselves well in the environments that were being funded to help them. And problems including abuse and maltreatment and the long term adjustment problems that are often consequent to this were not only merely products of the institutions, but found in families prior to and even after institutionalization, during home visits, for example.

Later in his career, Terry took over a residential treatment program for children and adults with severe autism and extremely challenging behaviours. He instituted training and implementation of treatment programs using Applied Behaviour Analysis. He expanded the program from one site and seven residents to five sites and seventeen residents. Terry then moved over to child welfare and managed the creation and operation of specialized fostering, child protection and family support systems for children with a variety of special needs, including autism, behaviour disorders, neurological conditions, developmental disabilities, and medical frailties. Terry ended his employment career running a multi-service organization providing services to adults with developmental disabilities, seniors, people who were homeless in a small-town/rural county in Eastern Ontario, youth transitioning from care in the child welfare system to the adult residential system for people with developmental disabilities, and worked as a family support worker for the autism Intensive Behavioural Intervention program in Lanark, Leeds and Grenville. During this entire time, Terry also has provided private counseling to couples, families, and individuals, including people with developmental disabilities, and continues to this day. He joins Dr. Bob Carey in promoting Positive Systems Approach training,

development and implementation, utilizing the experiences of a nearly fifty year career helping make the world a better place, especially for people with developmental disabilities, and their families.

Terry concluded that there was no source examining how community living organizations succeeded (or failed) in dealing with "behaviour problems" in their clientele, and there was at least anecdotal evidence that individuals with abuse histories, those living in highly dysfunctional families, and those with neurological and developmental disorders that have anomalous behaviour patterns often associated with them, were still needing better care and adaptation to help them live satisfying lives in the community of their choice.

For more of a sense of what was going on at that time, the reader is referred to two documents created by Terry for Oxford Regional Centre administration speaking of conditions of the day: "Oxford Regional Centre's Aging Population: Proposals and Recommendations for Programs and Services" (1987), and "Oxford Then and Now: A Critical Review of Oxford Regional Centre Client Services 1980 to 1986". We apologize in advance for the uncomfortable use of some of the terminology then in use, but remember, it was written in the late 80s. These historical documents can be accessed on our website at drbobcarey.com (About page).

The newly developed Community Service team was, however, sorely lacking in resources as we consisted only of a few social workers, a speech pathologist and Dr. Carey. It became very clear to him early on that the front-line staff employed by community agencies had almost no formal training in the use of behavioural approaches. To compound matters even more, they and the management of community agencies had a very sceptical view of behaviourism – as they associated these types of "treatment procedures" with the negative connotations that were pervasive at the time with respect to "behaviour modification". These attitudes had been influenced by some of the negative press regarding some aversive conditioning programs – such as the work done by Ivar Lovaas starting in the 1960's (Lovaas et al, 1965). This involved using the kinds of operant conditioning techniques pioneered by B.F. Skinner in his work in the animal learning field and applying them to children with Autism (Skinner, 1953; 1957) – most of whom were non-verbal or had limited language.

Lovaas initially used positive reinforcement, primarily food items, to shape functional language. However, the shaping procedures involved intensive programming, *often* leading to children displaying self-injurious behaviours in response to high demands, such as head banging. This prompted Lovaas to experiment with aversive conditioning techniques and the application of punishment, contingent on self-injurious behaviours. Initially, physical punishment, such as slaps to the face, hands or bottoms, was used. This later transitioned into applying electric shock through floor grids or a "hot shot" device that delivered a painful one-second shock to the child's leg.

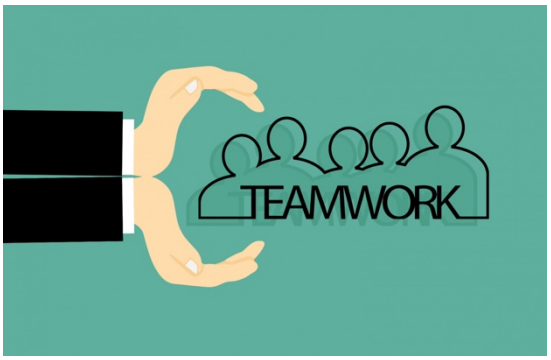
Lovaas continued to experiment with various aversive techniques, including electric shocks administered through electrified floor grids and small remote-control devices taped to children's wrists. He also developed a hand-held instrument called the *"*hot shot*"*, which was applied to a child's leg, delivering a painful one-second shock. These aversive conditioning procedures persisted for decades, even appearing in popular culture, such as the movie "Clockwork Orange," released in 1971. Despite ethical concerns from the broader society, the use of contingent electric shock persisted into the current century (e.g. – Israel et al, 2008). In 2018, a special interest research group within the International Association for the Scientific Study of Intellectual and Developmental Disabilities (IASSIDD) developed a policy position statement opposing the use of contingent electric shock. While the American Food and Drug Administration banned its use, a Federal Court in the U.S. overturned that ban in 2021, permitting its use at the Judge Rotenberg Educational Centre in Massachusetts. Even in Ontario, while institutions were still operational, one facility continued to use contingent electric shock in a special treatment unit for individuals with high levels of aggression and self-injurious behaviour. Given this controversy, community agencies were understandably apprehensive about becoming involved in "treatment" procedures they considered dehumanizing and ethically questionable. The debate about this use of highly aversive forms of consequences for behaviour remains largely unresolved, though use of contingent electric shock (not to be confused with electro-convulsive therapy (ECT) as a treatment for severe and unrelenting depression) remains extremely rare and is even outlawed in many jurisdictions. Arguments both pro and con often resort to forms of emotional reasoning, straw manning, and other illogical forms of reasoning. Such arguments are not the reason for this book, however. One reason for this book is to advance the principle of non-aversive uses of applied behaviour analysis, negating the need for such extreme methods, wherever possible.

This challenging climate confronted Dr. Carey as he tried to introduce community agencies to the systematic application of applied behaviour analysis principles and techniques in support plans for individuals transitioning from institutions to community homes. Unfortunately, front-line staff and agency management were resistant to the idea of "behaviour modification," seemingly believing that any behavioural issues these adults exhibited in institutions would naturally disappear in more *"*normalized*"* community settings. However, this assumption rarely held true, and his recommendations to apply principles of applied behaviour analysis most often went unheeded. Additionally, there was a glaring lack of resources provided to community agencies despite the considerable "savings" in daily expenditures per person served between institutional living and community living. Those agencies willing to support challenging individuals often struggled with inadequate staffing ratios, untrained staff in managing challenging behaviours, and little consideration for creating suitable physical environments that addressed individual needs. These barriers threatened to seriously undermine our efforts in facilitating the transition of these individuals to their new community homes, making it evident that significant changes in service delivery were needed for deinstitutionalization to succeed.

Therefore, in the mid to late 1980s, Dr. Carey proposed a substantial increase in the resources available to Oxford Regional Centre's Community Services Team to meet the demands of transitioning individuals from institutional to community settings. This proposal included the establishment of a new category of clinical support staff attached to the Community Support Team, working under the supervision of a Psychologist. This new role primarily involved the position of a Behaviour Therapist, though over the years, these clinicians often diversified into different areas, such as trauma counseling and treatment of those who were victims of sexual assault. At that time, universities and community colleges at the undergraduate level offered limited training in applied behaviour analysis. To address this gap, Dr. Carey developed a 10-week training course covering the basics of applied behaviour analysis, leading to the issuance of a Certificate of Achievement in ABA upon successful completion.

With the support of the newly formed Ontario Behavioural Association, Dr. Carey advocated for the implementation of this training and certification model for behavio*u*r analysts on a provincial level. While we received approval at the time, the subsequent change in government after an election led to the shelving of this initiative, as it was perceived to be financially burdensome. However, fast forward three decades, and it is gratifying to see many universities and colleges now offering

comprehensive ABA programs. In addition, the practice of ABA in Ontario is now regulated and falls under the jurisdiction of the Ontario College of Psychologists. The reader is referred to the College website if they wish more information on this process - https://cpo.on.ca/aba/aba-information-and-updates/.



The Community Service team at Oxford Regional Centre expanded rapidly, incorporating over a dozen behaviour therapists, two or three Psychologists, several Psychological Associates at the Master's level, several Social Workers, Nurses, a Consulting Psychiatrist, and a Speech & Language Pathologist. We had effectively transformed into a true multi-disciplinary team, better equipped to tackle the challenges of deinstitutionalization.

Our behaviour therapists worked closely with front-line staff to provide training, collaboratively develop support plans, establish behavioural assessment procedures to identify the functional aspects of problematic behaviours, and monitor progress over time. Given the community agencies' reluctance to accept advice from a facility-based behaviour service, we realized the importance of rebranding our approach and focusing more on the positive aspects of ABA. Additionally, we acknowledged the significance of system factors and incorporated non-ABA-specific ideas and philosophies that were favored by community agencies at that time but remained compatible with the positive and non-aversive approaches we advocated. This gave rise to what we now refer to as the Positive Systems Approach (PSA).

The Positive Systems Approach became the cornerstone of the clinical interventions offered by the Community Services Team. After the closure of Oxford Regional Centre, this approach continued through the divested agency known as Regional Support Associates (RSA). Staff from RSA and Dr. Carey conducted numerous two-day PSA workshops with community agencies over the years, and the PSA approach gained significant traction within community living agencies in Southwestern Ontario. Significant achievements have resulted from collaborative endeavors with community agencies, including the successful support of highly challenging individuals who were formerly placed in specialized treatment units. These units had maintained staffing ratios of up to 4:1, employing aversive conditioning methods (including shock therapy), and utilized mechanical restraints.

As this book will elucidate, the Positive Systems Approach (PSA) is not a mere technique employed solely when addressing severe behavioural issues; rather, it is a philosophy that demands adoption by support workers, managers, and all caregivers. PSA represents a 24-hour, seven-days-a-week strategy with a strong focus on prevention through the reconfiguration of environmental and support arrangements, ultimately enhancing an individual's prospects for success. This approach is often characterized as a synthesis of the favourable aspects of Applied Behaviour Analysis and Systems Theory. We firmly believe that the most effective application of ABA should be executed with meticulous consideration of critical system factors.

Furthermore, Dr. Carey's experience as a Clinical Psychologist has underscored the importance of recognizing concepts such as:

- therapeutic rapport,
- trust,
- unconditional positive regard,
- the understanding that behaviors do not occur in isolation but rather serve as a form of communication.

ABA holds significant potential for identifying the functional communicative aspects of behavior. Embracing the fundamental premise that behavior is a form of communication obviates the need to pursue "response suppression" through the application of punishment or aversive consequences. Such an approach would disregard the communicative aspects of behavior, which convey essential unmet needs on the part of the individual.

In this book, we will endeavor to expound upon the key components of PSA and explain how it should be integrated with Applied Behavior Analysis. Additionally, we will provide several case examples in the hope of illustrating how these principles manifest in practice.

Study Questions

1) Why were community agencies supporting individuals with intellectual and behavioural challenges so reluctant to use commonly accepted behaviour modification techniques?

2) What were the driving forces that led to the development of Positive Systems Approach back in the 1980's?

3) What are examples of some of the "non-ABA" approaches that Positive Systems Approach (PSA) incorporates?

4) Why is it important that we recognize that PSA is not simply a "technique" to be used when individuals are presenting with behavioural challenges?

5) Why should we not view "response suppression" as a "treatment goal" when working with individuals who present with severe behavioural challenges?Why were community agencies supporting individuals with intellectual and behavioural challenges so reluctant to use commonly accepted behaviour modification techniques?

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9) Why should we <u>not</u> view "response suppression" as a "treatment goal" when working with individuals who present with severe behavioural challenges?

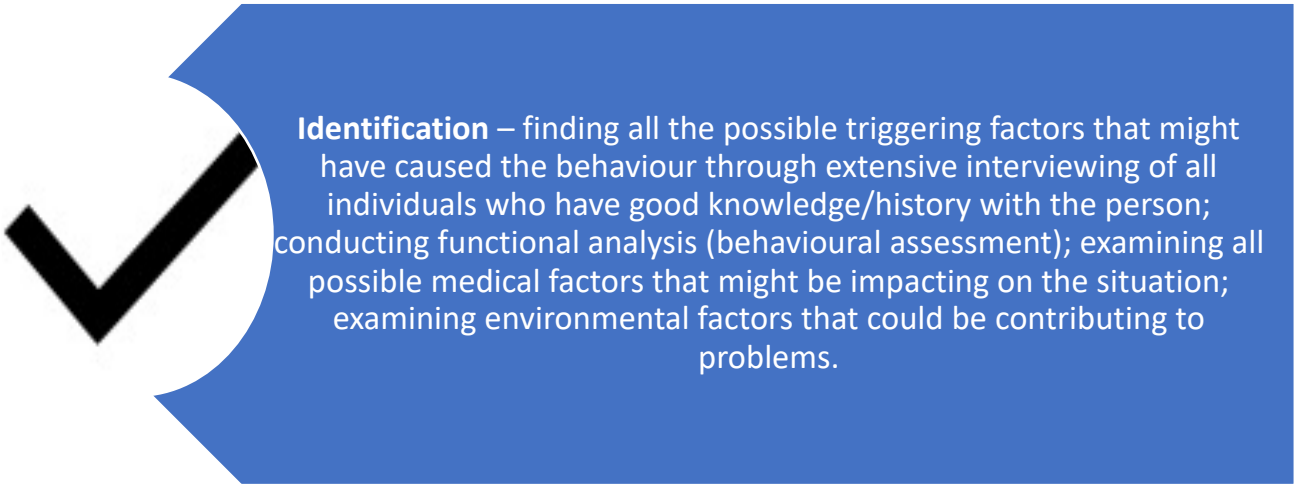
Chapter 2: What is PSA? Overview

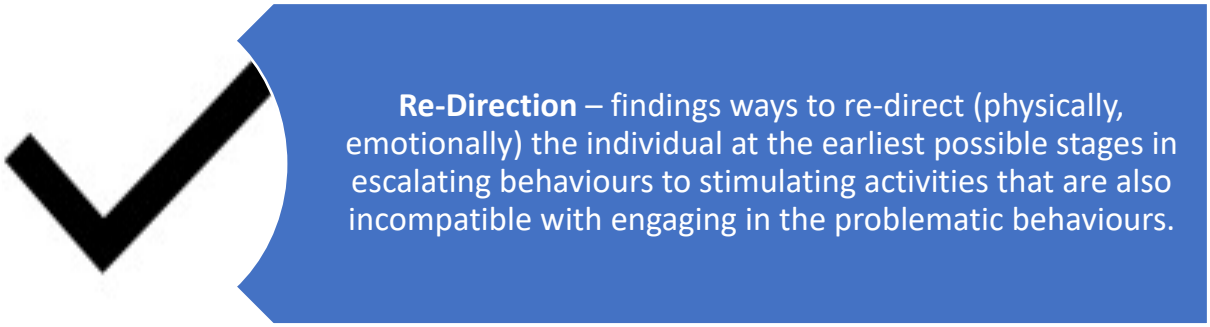
PSA is divided into two main components: **Individual Factors and System Factors.**

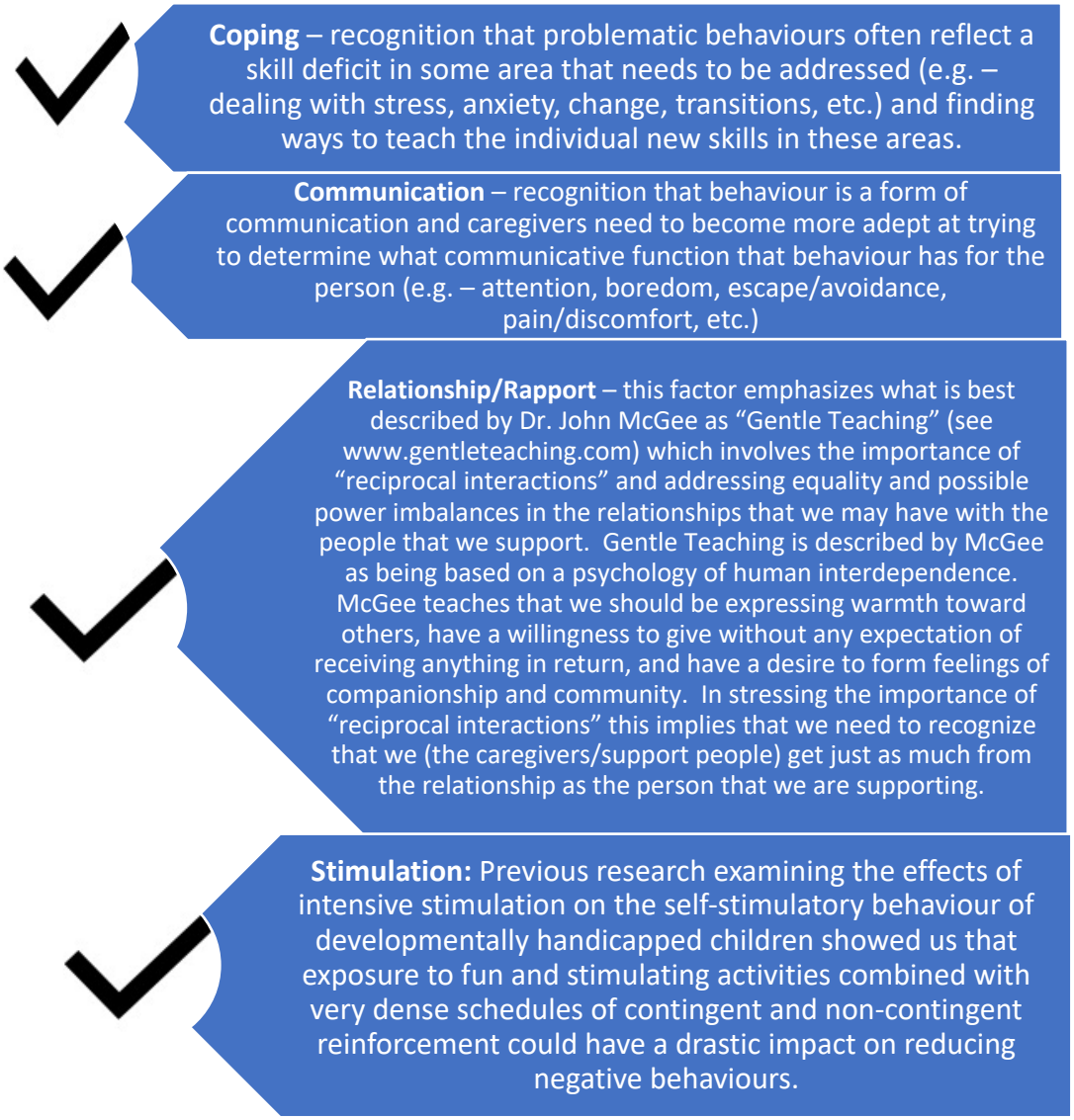
The reader may note that the focus on individual factors as they combine with system factors is similar to the family approach pioneered by Dale Munro (Munro, 2020) as it applies to family support models. Munro developed a Positive Intervention Family Support Model (PIFS) for situations that demand a high level of family and service system cooperation. He recognized that it is best to view family supports within a systems framework and, in his extensive experience as one of the leading social workers in the developmental disabilities field, he has developed a positive systems model for reducing family-system distress, improving communication and interpersonal relationships, role clarification and improved planning, advocacy and case management for people with a developmental disability (Munro, 2020). This strengths-based perspective is rooted in positive psychology and provides an excellent framework for working with challenging families.

Similarly, Positive Systems Approach also focusses on "what's strong and not what's wrong" in advocating for positive approaches in working with challenging individual behaviours.

The 7 **Individual Factors** are labelled as:






Coping – recognition that problematic behaviours often reflect a skill deficit in some area that needs to be addressed (e.g. – dealing with stress, anxiety, change, transitions, etc.) and finding ways to teach the individual new skills in these areas.
Communication – recognition that behaviour is a form of communication and caregivers need to become more adept at trying to determine what communicative function that behaviour has for the person (e.g. – attention, boredom, escape/avoidance, pain/discomfort, etc.)
Relationship/Rapport – this factor emphasizes what is best described by Dr. John McGee as "Gentle Teaching" (see www.gentleteaching.com) which involves the importance of "reciprocal interactions" and addressing equality and possible power imbalances in the relationships that we may have with the people that we support. Gentle Teaching is described by McGee as being based on a psychology of human interdependence. McGee teaches that we should be expressing warmth toward others, have a willingness to give without any expectation of receiving anything in return, and have a desire to form feelings of companionship and community. In stressing the importance of "reciprocal interactions" this implies that we need to recognize that we (the caregivers/support people) get just as much from the relationship as the person that we are supporting.
Stimulation: Previous research examining the effects of intensive stimulation on the self-stimulatory behaviour of developmentally handicapped children showed us that exposure to fun and stimulating activities combined with very dense schedules of contingent and non-contingent reinforcement could have a drastic impact on reducing negative behaviours.

The **7 System Factors** include:

Flexibility – addressing the need of the system to be flexible to the needs of the individual in important areas such as: level of staffing/caregivers, training requirements for staff/caregivers, day program requirements, setting variables and living arrangements.

Perseverance/Tolerance – recognizing that individuals who demonstrate challenging behaviours will require considerable commitment and perseverance on the behalf of the agency that is providing the supports. There needs to be a recognition that crises and challenges are going to occur on a regular basis with some individuals and, rather than give up or look for an easy and passive approach to the problem (e.g. – sedating medication, placement failure, use of mechanical restraints or other punishment approaches, admission to hospital) that we need to persevere in exploring systemic changes that might assist. There needs to be a recognition and acceptance that some behaviour may be a long-standing and entrenched part of a personality or represent a communication strategy that individual has or is perhaps an inherent part of a specific syndrome or disorder (e.g. – obsessive/compulsive behaviours that are often part of Autism Spectrum Disorder) and may always be present in this individual to some degree.

Consistency – finding ways to develop a consistent interactional approach amongst all the caregivers that have contact with the individual. Lack of consistency in approach is one of the biggest problems that we face as it frequently leads to confusion and may even inadvertently reinforce the very behaviours that we are trying to reduce.

Portability – addresses the need for a Positive Systems Approach and behavioural treatment that is able to move between all of the different environments that an individual functions in.

Intensity – findings ways to provide the required levels of resources and human interactions when they are most needed.

Change - examining ways to change the stimulus conditions that are precipitating the behaviours (in behavioural terms - using stimulus change and stimulus control techniques); finding ways through advocacy and management to achieve changes in the individual's support system.

Team Health: Agency, Team and Individual level - addressing ways to foster a spirit of cooperation and team building between all caregivers to maximize consistency and opportunities to make the required changes. This factor discusses the importance of developing a "core team" as well as the advantages of support circles for some individuals with extreme challenging behaviours.

Study Questions

1) List the 7 Individual Factors included in PSA:

2) List the 7 System Factors included in PSA:

3) Why do you think that McGee's Gentle Teaching approach was included in PSA?

4) What kinds of system issues might need to be addressed in trying to achieve the levels of stimulation that PSA recommends?

5) Provide some examples of a system that is "flexible" when supporting individuals with behavioural challenges:

6) Give an example of 1 or 2 ways in which a system can improve on the level of "consistency" provided when supporting an individual with behavioural challenges:

Chapter 3: Theoretical Underpinnings of PSA

Positive Systems Approach incorporates elements from Applied Behaviour Analysis, along with psychological theories regarding impact of family, culture and trauma as well as Systems Theory.

Applied Behaviour Analysis

The field of Applied Behaviour Analysis (ABA) has a rich history dating back well over a century. In the early 1900s, Edward Thorndike pioneered research in animal learning and formulated the "law of effect," which essentially states that behaviours resulting in positive outcomes are likely to be repeated, while those leading to negative consequences are less likely to recur. This fundamental process of learning, applicable to both animals and humans, was later coined as "operant conditioning" and has been applied by parents, coaches and educators for generations, without it being labeled or recognized as such. There isn't a human being, or a being of any kind, that has not been subject to operant conditioning during its lifetime. ABA merely studies this scientifically, exposing the components of it, and making use of this knowledge to be more conscious in its use. Like all scientific study of any phenomenon, it is never "settled", and continues to evolve over time.

The formal terms and theories of "operant conditioning" and "behaviour modification" were chiefly advanced by B.F. Skinner. In 1938, Skinner authored his first book, "The Behavior of Organisms: An Experimental Analysis," marking a significant milestone in the field (Skinner, 1938). Over the course of the 20th century, Skinner conducted extensive research, elucidating the core principles of operant conditioning. His ground-breaking work laid the groundwork for the development of behaviour modification techniques for human applications, involving the use of positive and negative reinforcement, as well as punishment, to shape and alter behaviour. Skinner's ideas exerted a profound influence on the realm of psychology, catalyzing the emergence of Applied Behaviour Analysis (ABA). This field encompasses a diverse array of applications, all rooted in a rigorous scientific methodology, with the overarching aim of comprehending, analyzing, and modifying human (and animal) behaviour.

A pivotal aspect of ABA lies in acknowledging the significant role that the environment plays in shaping behaviour. Throughout this book, you'll find that this concept is crucial to understanding the Positive Systems Approach. Often, the simplest way to bring about behavioural change is by modifying key environmental

factors that may trigger or sustain certain behaviours. In fact, PSA focuses a great deal on the "A" part of the "ABC's of Behaviour" (Antecedents, Behaviours, Consequences), where traditional "Behaviour Modification" tends to focus more on the "C" part. (This may be related to the ABA focus on objective, measurable, verifiable observations, which is more easily obtained by studying what happens immediately after a behaviour occurs. Instincts, neurological or biological processes, thoughts, ideas, values, frames of reference, perspectives and such, are harder to measure this way).

In contemporary times, ABA techniques have gained mainstream recognition due to their demonstrated success in teaching new skills, mitigating challenging behaviours, enhancing social and communication abilities, and overall functional improvement. ABA is now recognized as one of the most well-supported approaches for individuals with developmental disabilities, thanks to its foundation in evidence based practices and extensive research findings in scientific literature. Other methods which utilize ABA ideas, such as Cognitive Behaviour Therapy (CBT), Dialectical Behaviour Therapy (DBT) and even ACT (Acceptance and Commitment Therapy), are also proving experimentally to be valuable help for previously intractable or challenging problems in all populations, including those with learning disabilities and mental illness.

On a personal note, Dr. Carey has contributed to ABA research through publications in ABA journals, such as the Journal of Applied Behavior Analysis and Behavior Modification (Carey & Bucher, 1981, 1983, 1986). Additionally, he briefly described the Positive Systems Approach in a chapter within a book on Dual Diagnosis (King & Carey, 2002). Terry Kirkpatrick has also written extensively on the importance of system factors in determining the success or failure of community placements. If the reader is interested in some historical context on how system barriers impacted the success of deinstitutionalization attempts in the 1980's they can refer to some of the papers Terry wrote on this contained in a Blog piece on our website at drbobcarey.com.

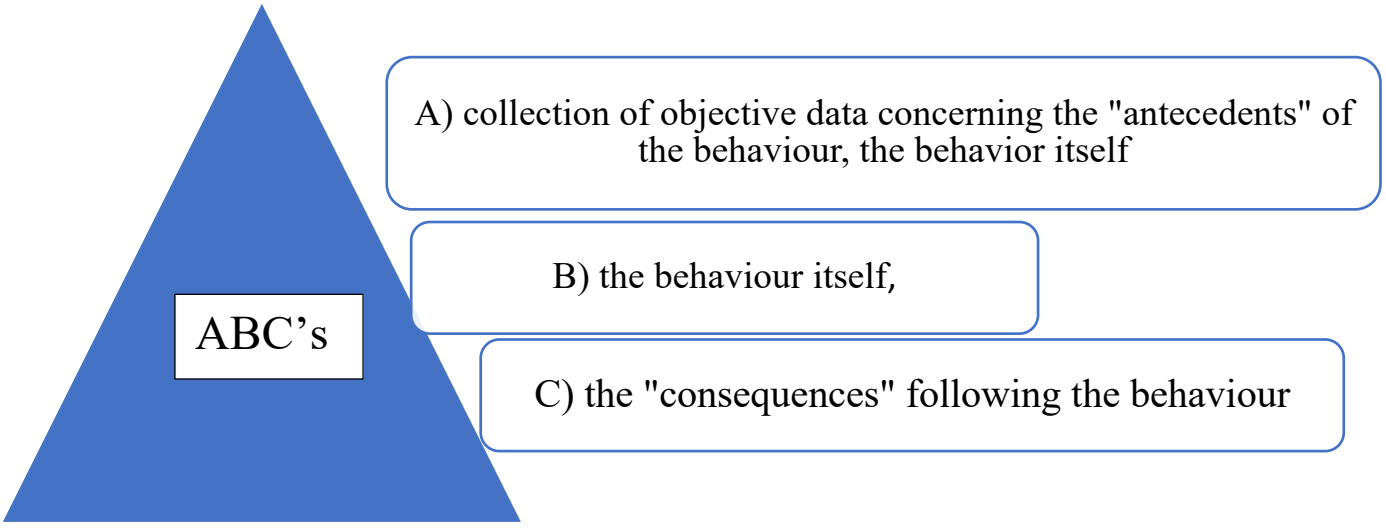
ABA has expanded beyond its original connotations as "behaviour modification" within the developmental disabilities field. It has found success in various other domains, including education, organizational behaviour management, healthcare, addiction treatment, and sports performance enhancement. However, it has not achieved widespread popularity without encountering controversy, often stemming from the intensity of its programs and ethical concerns regarding the use of aversive methods.

This is why we emphasize the importance of adopting a positive, balanced, and holistic approach to support individuals with complex behavioural needs, especially including an intensive examination of predisposing and antecedent conditions known to affect behaviour, and we firmly believe that the Positive Systems Approach embodies these principles without sacrificing any of the scientific and practical rigour of ABA principles.

We won't delve into extensive theoretical details about the scientific foundations of various ABA elements, as there exists a wealth of journals and textbooks for those seeking a deeper understanding. Instead, we will concentrate on those ABA elements that play a central role in the Positive Systems Approach.

Functional Analysis of Behaviour

In our previous discussion outlining the core individual components of PSA, we mentioned that the initial step involves "Identification." In a later chapter, we will provide a more detailed explanation of the specifics of this component. It's essential to grasp that, from a theoretical standpoint, this component relies heavily on what is known in ABA as a "Functional Analysis of Behaviour." This process entails the use of a systematic assessment procedure to gain a deeper understanding of the function and purpose of a specific behaviour. Typically, it entails the:



This process is commonly referred to as gathering the ABC's (Antecedent, Behavior, Consequence) of the "target" behavior that we aim to modify. Antecedents are the events or circumstances preceding the behavior, and consequences are the events or circumstances following the behavior.

ABA has a long history of placing strong emphasis on systematic recording and analysis of behaviors that are:

- objective,
- observable,
- measurable,
- well-defined.

In fact, this is a fundamental distinction that sets it apart from many other therapeutic approaches, which often focus on altering thoughts or emotions rather than behavior. The Identification component of PSA is pivotal to its success because it operates on the premise that understanding the factors that trigger and maintain a behavior is a prerequisite for facilitating behavioral change.

The functional analysis involves:

- collecting data through direct observation and measurement,
- encompassing factors such as duration (i.e., how long),
- intensity (i.e., how strong),
- recording details of antecedents and consequences.

Based on the gathered data, we formulate a hypothesis about the purpose and function of the behaviour. This hypothesis may include "conventionally understood" categories like seeking attention, escaping from demands or aversive situations, attempting to access desired items or activities, or engaging in self-stimulation. As part of our Functional Analysis, we can manipulate specific conditions (e.g., attention, demand, escape, and solitude) and assess their impact on the behaviour. We systematically vary these conditions to identify the functional relationship between the behaviour and the environment. If we discern a consistent pattern across different conditions, we can reasonably conclude that we have a solid understanding of the primary function of the behaviour (bearing in mind that a behaviour may serve both primary and secondary functions).

Identification of Other Factors such as Family, Culture and Trauma History

In a strictly ABA approach, we would formulate a behaviour program with the specific aim of modifying antecedents and/or consequences to bring about change. However, the Positive Systems Approach goes a step further by delving into additional factors that might provide insight into the origin and maintenance of the behaviour (i.e. we spend considerable effort in identifying more elements of "A" (Antecedents) which might be at play). These are aspects that are not typically embraced in ABA circles due to their challenging or often impossible nature to measure objectively (e.g., the impact of a trauma history or the influence of evolutionarily installed "hard-wired" behaviour chains), but have been incorporated into modern non-ABA therapies like CBT, DBT, ACT, Narrative Therapy, NLP, EMDR, etc.

PSA recommends conducting a comprehensive assessment, akin to a Bio-Psycho-Social Assessment, to gain a more holistic understanding. This entails looking beyond the obvious, immediately observable and measurable antecedents and consequences of behaviour and delving into the individual's history. Questions to consider include:

- **The individual's family background**
- **The onset of the behaviour**
- **How it was managed historically**
- **Any cultural influences shaping the behaviour**
- **Whether the individual has a history of trauma**
- **Any known or identifiable neurological conditions a person may have**
- **Any known or identifiable psychiatric conditions a person may have**
- **The medications a person may be being treated with**
- **Any known or identifiable medical condition a person may have**
- **Any recent losses or disruptions to a person's living conditions or relationships**
- **Any disruptions to development of trust and a "secure attachment", or a history of upbringing or significant exposure to unsafe, unreliable, high-conflict or chaotic relationships or environments**

When addressing behavioural issues, it is imperative to account for cultural influences, as they have a significant impact on an individual's beliefs, values, and behaviours. The cultural factors to be considered should encompass an exploration of the individual's cultural norms and expectations. Different cultures often have distinct norms and expectations regarding what constitutes "appropriate behaviour." It is crucial to recognize that behaviour can be easily misinterpreted when viewed through the lens of a different cultural context where the behaviour might be entirely acceptable.

The following **cultural considerations** need to be taken into account:

⇒ **Language and communication**: Language barriers can affect the assessment and treatment process. Providing culturally sensitive and language-appropriate assessment tools, interpreters if needed, and utilizing culturally competent communication strategies can facilitate effective understanding and collaboration.

⇒ **Cultural beliefs and values**: Cultural beliefs, including religious, spiritual, and traditional beliefs, influence how individuals perceive and cope with behavioural problems. Recognizing and respecting these beliefs can help establish a therapeutic alliance and ensure that treatment strategies align with the individual's cultural values.

⇒ **Family and community dynamics**: Many cultures emphasize the importance of family and community support systems. Involving family members and considering the impact of the wider community can enhance treatment outcomes. Collaborating with the individual's support network and involving cultural community resources can contribute to a more comprehensive and culturally responsive approach. Dale Munro (2013) talks extensively about the important impact of family health and how this can impact an individual's development. He noted that it is not unusual for children or teenagers with a dual diagnosis to lose contact with their family (e.g. – through hospitalization) and experience almost total rejection from their family. He also mentions that sometimes family members may also suffer from severe psychiatric problems, and this can greatly impact the level of attachment that a child has with his parents and negatively affects future relationships and ability to bond with others.

⇒ **Stigma and mental health attitudes**: Cultural attitudes towards mental health and seeking treatment can significantly influence help-seeking behaviours. Dr. Carey had one case that was referred to him whereby a young, non-verbal woman, of Mennonite background, was engaging in severe self injurious behaviour while being supported by a local community agency and residing in one of their group homes. When he met with her family to gather background information it was obvious that they were very traditional in their Mennonite culture (e.g. – they arrived to the appointment travelling in a horse and buggy). He explained to them that their daughter would be eligible for government funding to help provide the types of resources that she would require for her supports. They were unwilling, however, to even consider this, stating that they didn't believe in accepting government assistance. They were steadfast in this belief and explained that they would simply take her back home to live with them if the agency was no longer able to tolerate her behavioural challenges. Some cultures may stigmatize mental health issues, which can also impact the individual's willingness to engage in treatment. Addressing and challenging stigmas while providing culturally appropriate education can help reduce barriers to seeking and participating in treatment.

Trauma History:

We know that many of the people that we support with developmental disabilities have experienced trauma in their lives. There has been extensive research on the impact of trauma on behaviour in general – namely, issues like:

1) ***Hyperarousal And Hypervigilance*** – this could be manifested in an individual with intellectual challenges through behavioural acting out and becoming aggressive, anxious or even self-injurious when exposed to what they perceive as potential threats or triggers.

2) ***Avoidance And Withdrawal*** – the individual may go out of their way to avoid people, places or events that they associate with previous trauma.

3) ***Flashbacks*** – This is the situation where an individual experiences vivid flashbacks and re-lives a traumatic event, feeling as though they are

undergoing the event once more. During such episodes, they may become highly agitated and may act out. For non-verbal individuals, identifying that this behaviour is triggered by flashbacks can be extremely challenging. Therefore, it is crucial to rely on a comprehensive history that can unveil the nature of the trauma, coupled with a functional analysis to determine if the behaviour predominantly occurs in situations reminiscent of the traumatic event. For instance, consider the case of a 40-year-old woman, whom we will refer to as "Jane," with limited verbal skills. She was referred to us by her group home staff due to frequent, extreme aggression and angry outbursts, often involving property destruction and self-injury. The functional analysis revealed that these severe behavioural outbursts occurred almost exclusively when she was being supported by two male staff members (the only male staff in the group home). It was predominantly during their shifts that these behavio*u*rs manifested. These male staff members were known to be empathetic, supportive, and non-threatening, making it initially challenging to discern any differences in their interactions with Jane compared to the female staff in the group home. Subsequently, through extensive interviews with Jane's family (mother and siblings), previously undisclosed information was uncovered. It was revealed that Jane had grown up in a rural farm environment and had endured repeated sexual abuse by a male farmhand during her teenage years. This abuse persisted for years before being discovered. Due to the perceived negative stigma in their community, the family chose not to pursue legal charges, and thus, there was no record of this abuse, as it remained a "family secret." Significantly, the functional analysis of the behaviour also unveiled that during these outbursts, Jane would engage in what appeared to be self-injurious behaviour. This involved her lying on her back, emitting guttural and moaning sounds, writhing on the ground, and hitting herself. In light of this newly discovered history of sexual trauma, the behaviour was reinterpreted as Jane experiencing vivid flashbacks of her abuse, likely triggered by the presence of male staff supporting her (for instance, during activities like bathing or dressing). Consistent with PSA, when examining environmental and systemic factors, Dr. Carey successfully persuaded the agency to alter the way they supported her. She was no longer placed in a group home with male residents (where one of the male residents often walked around without clothing). Furthermore, he strongly recommended that she be exclusively supported by female staff. The agency implemented these changes, and even before formal behavioural treatment plans were put in place, Jane's behavioural outbursts virtually disappeared

shortly after transitioning to her new environment, in a separate, self-contained apartment within an existing group home.

4) ***Dysregulation*** – the individual may experience extreme mood swings, anger outbursts, irritability and emotional numbing. Once again, communication deficits may make it even harder for them to express and manage their emotions during these times. One of the areas that we really worked on with Jane in our example above, was to improve her coping and communication skills so that she would indicate to her support staff when she was starting to feel anxious. This allowed them to assist her in using some newly taught coping skills (e.g. – deep breathing, positive self-talk) and, if required, to simply "re-direct" her and change what she was doing or the environment that she was in at the time.

5) ***Cognitive Changes*** – there is extensive literature detailing the negative impact that trauma can have on individual's concentration abilities, memory and decision making. The individual may also develop a strong mistrust of others and have a negative self-perception. Interestingly, in our case example of Jane, once she got settled into her new living environment and developed a trusting relationship with her female "core team" of staff, she also began to become much more verbal and able to communicate her feelings.

6) ***Self-Destruction*** – As a maladaptive way of trying to seek relief, gain a sense of self-control or numb emotional pain, some individuals may engage in self harm behaviours. Sometimes, this may have a neurological origin, either as a response to medication side effects, or due to some dysregulation of the dopamine system, or possibly, some other as yet unknown triggering mechanism of one of the structures in the limbic system.

7) ***Relationship problems*** – Due to a lack of trust, the individual may sabotage relationships and have difficulty forming attachments. They may show separation anxiety due to a fear of abandonment.

Behaviour Assessment

Applied Behaviour Analysis (ABA) approaches heavily rely on a variety of behavioural assessment techniques, encompassing meticulous and objective data collection and analysis. It's important to note that while this is an integral part of the Functional Analysis mentioned earlier in the context of "Identification," behavioural assessment should extend beyond mere identification to encompass the measurement and evaluation of behaviour change over time.

Numerous dedicated resources, such as books, chapters, and journals, are available exclusively on the topic of behavioural assessment (e.g., Haynes & O'Brien, 2019). To achieve several critical system elements within the framework of a Positive Systems Approach, ongoing evaluation with observable and measurable goals is imperative. For example, if we propose that an agency should allocate more resources, such as staffing ratios, staff training, or the development of a "core team" to ensure consistency, we must be able to substantiate these recommendations by continually collecting data to demonstrate their effectiveness. We will delve further into the role of behavioural assessment in Chapter 5, specifically under the section on "Identification."

Reinforcement Theory

Reinforcement theory is a cornerstone of PSA, helping us comprehend the factors that sustain problematic behaviours and enabling the creation of circumstances conducive to developing new, alternative, and incompatible behaviours. This theory is rooted in the psychological concept developed by B.F. Skinner (Skinner, 1953), which elucidates how behaviour can be modified through the use of rewards and punishments. Skinner's series of animal learning experiments demonstrated that behaviours followed by positive (favourable) consequences tend to be repeated, while those followed by negative (unfavourable) consequences are less likely to recur. However, in alignment with the "Positive" aspect of the Positive Systems Approach, we refrain from employing approaches involving aversive stimuli and punishment-based (i.e. unfavourable) methods. The rationale for this stance will be elaborated on in the subsequent chapter (refer to "Problems with Punishment").

Reinforcement, in this context, refers to the consequences that follow a behaviour and increase its likelihood of recurring in the future. This concept can be perplexing and aspiring behaviour therapists often struggle to grasp the idea that nearly anything can serve as a "reinforcement," even actions that most people might consider “a

priori" aversive or negative. In essence, reinforcement isn't defined by its intrinsic nature (e.g., praise, special items, positive activities, food items, etc.) but by its impact.

Remember the rule: If, by following a behavior, it increases the probability of that behavior recurring in the future, then it qualifies as a "reinforcement" for that individual.

For instance, consider Johnny, whose physical aggression increases in response to a "verbal reprimand." In Johnny's case, the verbal reprimand serves as a positive reinforcement. It aligns with the adage that, for some individuals, negative attention may be preferable to receiving no attention. It's possible that Johnny is often ignored by his caregivers or support personnel, and he has come to perceive negative attention (i.e., a verbal reprimand) as better than being disregarded. Conversely, something generally considered a positive event, like verbal praise, might not act as a positive reinforcement for some individuals and could even function as a form of "punishment." For certain individuals, verbal praise may be associated with unwanted attention, making them uncomfortable. If praising someone for a desirable behavior results in a decrease in the occurrence of that behavior, we can reasonably conclude that praise does not serve as a positive reinforcement for that individual.

The other reinforcement concept that confuses a lot of people is the fact that there can be both "positive" and "negative" forms of reinforcement. Remember that positive reinforcement involves providing a desirable stimulus or reward after the desired behaviour occurs which increases the likelihood of that behaviour being repeated. Alternatively, negative reinforcement involves removing an aversive stimulus or discomfort after the desired behaviour occurs. Interestingly, this act of removing an aversive stimulus also increases the probability of the behaviour being repeated. So, in this regard the outcome is exactly the same as with positive reinforcement in that it increases the probability of a behaviour occurring again – but does so in an entirely different manner. For instance, Johnny dislikes his janitorial job that he has in the context of his supported employment position. Allowing him to leave work early once he has finished his various tasks can negatively reinforce his behaviour of janitorial task completion.

Earlier, we mentioned that Positive Systems Approach refrains from employing punishment-based strategies, which we will delve into in more detail later. It's

important to understand that, just as there are two types of reinforcement - positive and negative) there are likewise two types of "punishment": Positive Punishment and Negative Punishment. **Positive Punishment** entails the application of an aversive stimulus or the introduction of an unpleasant consequence (e.g., a verbal reprimand) following an undesired behaviour. If the behaviour's probability decreases over time due to the application of the aversive stimulus, it is considered *positive punishment*. we recognize that this terminology can be confusing because it's challenging to think of anything "aversive" as being "positive."

Similarly, just as there is positive and negative reinforcement, there is also the concept of "**Negative Punishment**." This concept is often seen within the context of a Contingency Management System (also known as a Token Economy). For instance, an individual on such a system may have a bonus reward in place for abstaining from physical aggression the entire morning. If aggression occurs within that timeframe, withdrawing or disqualifying the bonus can function as a form of negative punishment. It's important to note that we can only determine whether it functioned as "negative punishment" if it indeed results in a reduced likelihood of the behaviour recurring. We seldom engage in discussion of “negative punishment”, instead referring to any action, whether by application or removal, to be simply punishment when it is shown to be associated with a reduction in the measured response. This could also be contrasted with “extinction” or “planned ignoring”, in which no application or removal of a consequence is offered following a behaviour.

One area where the Positive Systems Approach diverges from traditional ABA theory and practice is its recognition of the significance of less observable (internal) human traits, such as thoughts, emotions, or cognitive processes. As mentioned previously, many individuals we support have experienced trauma in their lives, which likely influences their ability to form trusting relationships with others (refer to Relationship/Rapport under Individual Factors of PSA) and can lead to heightened levels of anxiety and/or depression that need to be understood in the context of the trauma and addressed by helping the individual acquire coping strategies (see Coping under Individual Factors of PSA). These strategies might involve the use of tools from Cognitive Behavioural Therapy, Mindfulness, Relaxation Training, or resilience strategies offered through Dialectical Behaviour Therapy or other Mindfulness approaches.

Problems with Punishment

We mentioned earlier that the use of aversive forms of punishment can be a part of applied behaviour analysis (ABA) treatment programs, but they are usually only used sparingly and under specific and extreme circumstances (e.g. – severe self-injurious behaviour that can be life threatening). The goal in these types of programs is quick and dramatic "response reduction" due to the potential harm of the behaviour. Dr. Carey has spent a lot of time researching the efficacy of "punishment" approaches in ABA (Carey & Bucher, 1981, 1983, 1986) and has concluded that, even though they may work quicker than positive-only approaches, they have a host of undesirable side effects that may create even worse problems in the future. These are some of our main concerns with the application of "positive punishment" approaches that use aversive strategies to reduce behaviours:

1. **Emotional And Psychological Effects**: It is not unusual for punishment techniques to induce fear, anxiety, and emotional distress. For some difficult and dangerous behaviours (e.g. – self-injury, aggression), some ABA programs have used contingent punishment approaches utilizing aversive stimuli such as water mist spray (e.g. – Bailey et al, 1983) or contingent skin shock treatment (e.g. – Blenkush & O'Neill, 2020). There is a lot of debate in the ABA community regarding the efficacy of these 'treatments' vis a vis the moral obligation to eliminate the dangerous behaviours in the quickest manner. Researchers are having ongoing debates on whether this is primarily an ideological issue (i.e. – ethical concerns over use of punishment) versus an empirical issue (i.e. – disregarding the data regarding efficacy of response suppression) (Blenkush et al, 2023). However, putting aside the issue of "treatment efficacy" where "efficacy" is defined strictly by response suppression, we have found that the use of these types of punishment approaches are not tolerated in community settings – and for good reason! They can be particularly problematic for individuals with developmental or communication challenges who may struggle to understand the connection between their behaviour and the punishment. There is a good chance that, through "classical conditioning" processes (for a good explanation of this see Clark, 2004), these punishment approaches could lead to negative associations with therapy or therapists, hampering the therapeutic relationship (see importance of Relationship/Rapport under Individual factors of PSA).

2. **Doesn't Address Root Causes**: Secondly, punishment approaches may produce a temporary suppression of the behaviour but because it doesn't address the underlying root cause of the behaviour, it is unlikely to produce longer term change.

3. **Limited Generalization:** Because punishment approaches are really limited in that they usually only work in the context and environment where they are being applied. This results in what we refer to as "limited generalization". The individual may not generalize the desired behaviour to other settings or situations where the punishment approach is not or cannot be applied. This makes it very challenging to achieve behaviour change across various contexts and environment.

4. **Negative Side Effects:** It is not uncommon for punishment approaches to produce undesirable side effects. If we tried to use a punishment approach for something like physical aggression, we shouldn't be surprised if the individual reacts to the consequence with more aggression or simply leaves the area. Once again, this impacts relationship/rapport and does not provide them with an opportunity to learn coping skills for that situation.

5. **Ethical Concerns:** Finally, and some would say most importantly, there are ethical concerns in using an approach that focuses on behavioural suppression rather than teaching alternative, appropriate behaviours. It is encouraging that, over the years, ABA has become much more centered on promoting positive behaviour change, teaching new skills, and improving the overall quality of life for individuals. If caregivers are well trained in ABA, then they should be quite capable of exploring and utilizing positive approaches and do not need to rely on the quicker, perhaps more habitual, easier or at least more expedient (and often temporary) outcomes stemming from punishment-based approaches.

Conclusion Regarding Punishment:

There is certainly no place for punishment approaches in community settings where oftentimes there is a lack of professional supervision, creating potential for inappropriate and inconsistent use. In addition, use of aversive approaches often forces the caregivers to assume an authoritarian position of power over the individual they are supporting. This can be very upsetting to all involved and interferes with the type of relationship that is preferred – that is, a positive, supportive relationship with a foundation of trust and respect. Positive Systems Approach relies on:

⇒ the combination of using positive reinforcement strategies,
⇒ teaching replacement behaviours,
⇒ modifying various systemic factors to produce long-term, positive behaviour change.

Every individual is unique, and the best support plan is one that is comprehensive and tailored to the needs of that person based on extensive analysis and assessment of the function of the behaviour.

Systems Theory

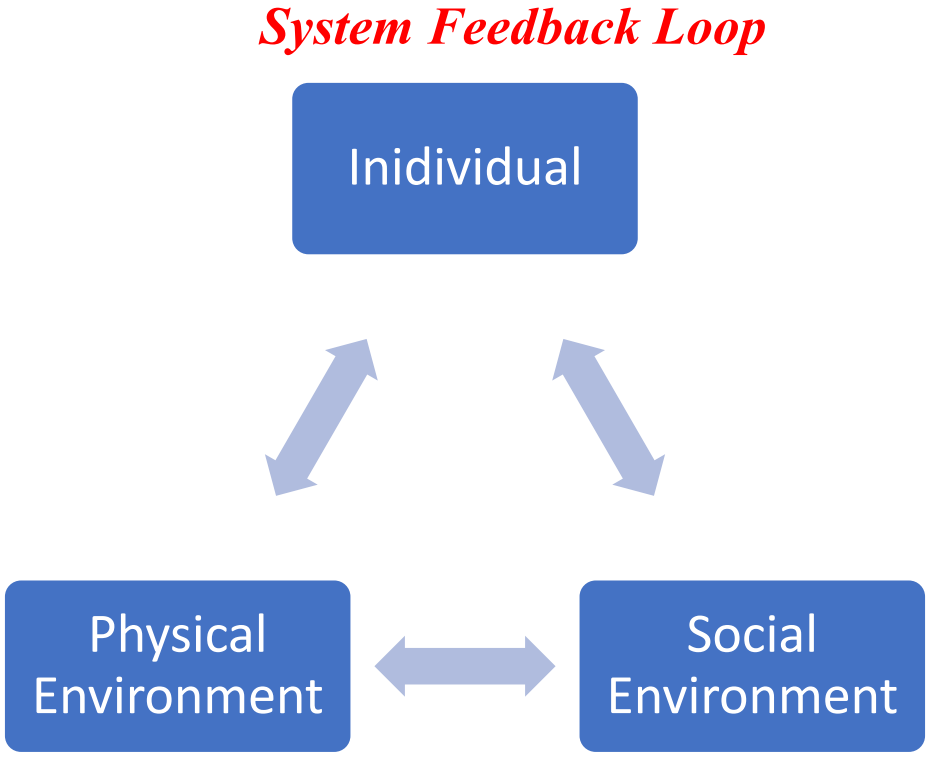
PSA looks at both the Individual and System components that may be interacting and affecting the psychological well-being of individuals. It is important to consider the various components of the system and the changes that occur when the interactions are changed, with emphasis on the environment and the ability to make changes in the environment to benefit the individual. It is hypothesized that an individual's thinking (cognition), feeling (affect), and willing (volition, conation) as well as overt behaviour develop as a result of transactions between the individual and others in his/her environment. Systems theory closely considers all aspects of the person's environment and the feedback from the environment resulting from the individual's overt behaviour.

Positive Systems Approach recognizes that we cannot change the way that a person behaves without having a thorough understanding of the system that the person functions in. We have found that we are often able to change behaviour simply by changing the environment and the way that we interact with that person – as opposed to trying to change the individual (e.g. – through structured ABA techniques). This is a much less intrusive and positive approach to changing human behaviour – and, often, much more successful in terms of achieving enduring changes that generalize to various situations.

So, what is systems theory? It is generally defined as a comprehensive framework used to understand psychological and behavioural change in individuals within the context of complex systems. Systems theory takes into account the fact that all individuals are embedded within larger systems, such as families, organizations, communities, and society, and that these systems influence and are influenced by the individual's behaviour and experiences. Simply put, behavioural support plans work best when they take into account all these factors and don't simply try and "treat" the "target behaviour" in isolation and without full consideration of the systemic factors.

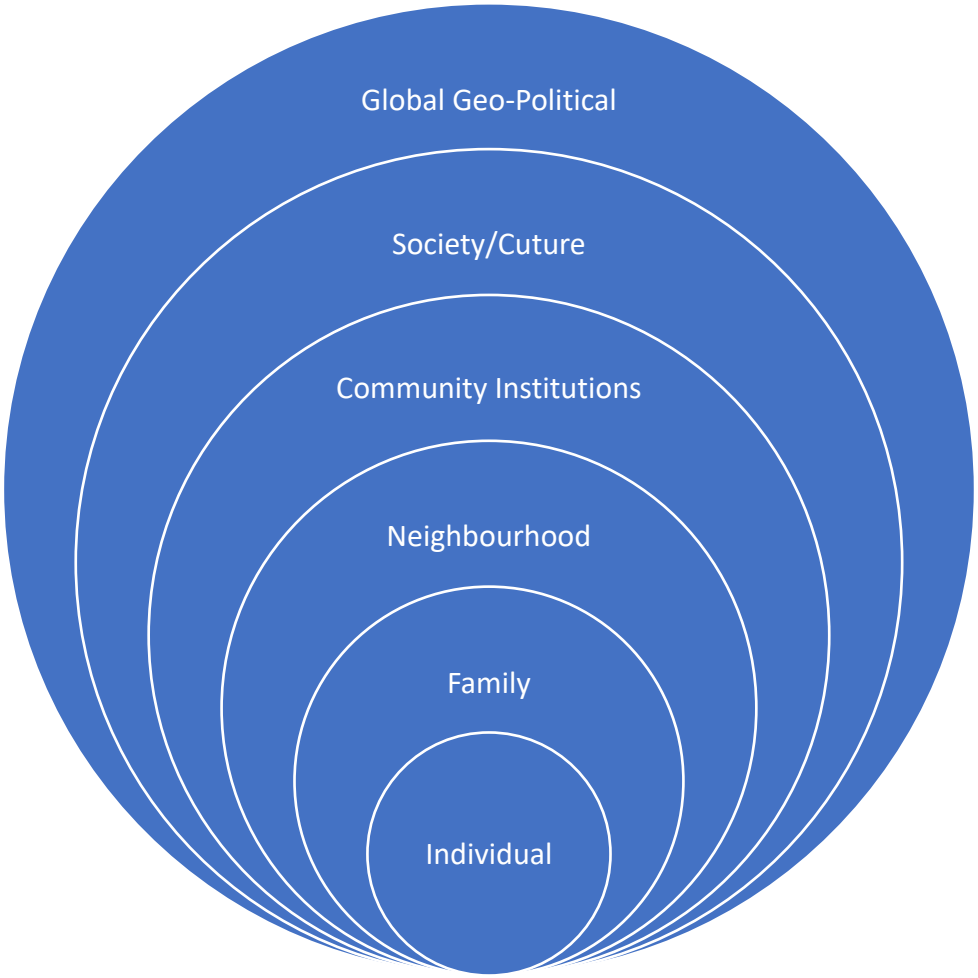
According to systems theory, individuals are not isolated entities but are interconnected with their environment and other people. There is always an interdependence and dynamic interaction occurring between the individual and the systems they are functioning within. One simple change in any part of the system can have a ripple effect – in either a positive or negative direction.

To put this another way, when we are interested in creating psychological and behavioural change, then we need to understand that changes in an individual's thoughts, emotions, and actions are not solely determined by internal factors but are also influenced by external factors and the relationships they have with others. Not only is the individual impacted by the system that they are functioning within, but that individual also plays a key role in influencing the functioning of the system as a whole. This plays into the concept of feedback loops, where changes in one part of the system have consequences and feedback effects on other parts. In behavioural terms, these types of feedback loops often function to reinforce existing patterns of behaviour, or they can be instrumental in creating new patterns of behaviour and interactions.



PSA relies heavily on exploring how changes in one system, such as a family, group home or social network, can impact an individual's thoughts, emotions, and behaviours. This creates a holistic and interconnected perspective on understanding psychological and behavioural change in individuals as it focusses on the importance of considering the dynamic relationships between individuals and their social environments.

The level of system that most impacts the vulnerable individuals that we support typically occur on a microsystem level (the other higher levels typically involve societal and global systems). On a microsystem level, an individual is born into a family and is influenced by the members of that family along with their local neighborhood or community institutions such as the school, religious institutions and peer groups as well as the specific culture with which the family identifies.



This early learning is critical to understanding influences on the individual which can have long-lasting impacts. For instance, a child may grow up without a strong connection to their family because of various factors (i.e. – parental mental health, loss of parent, long term separation from parent, inconsistent parenting due to mental health and/or addictions etc.) and develop what we refer to as an "Attachment Disorder". This can occur when there is a disruption in the formation of secure attachments between a child and their primary caregiver. How can this impact an individual growing up and why is it important for us to consider this aspect of the system that the individual grew up in? First of all, it is not unusual that children with attachment disorders often experience difficulties in forming and maintaining healthy relationships. They may struggle with trust, emotional intimacy, and sharing their feelings with others. This can lead to challenges in developing close friendships and a support network later in life. The fact that the individual may have trust issues means that we need to consider this in our support plan (i.e. – see System Factors – Consistency). Supporting this person with multiple caregivers who are constantly changing (i.e. – think of a larger group home that may employ 20 staff or more given day, night, weekend shifts) means that there is apt to be a lack of a close and trusting relationship and this will certainly affect our ability to create a therapeutic rapport to help encourage behavioural growth. Secondly, it is well known that attachment disorders can contribute to emotional and behavioural difficulties. This often includes heightened anxiety, anger, aggression, impulsivity and self-destructive behaviours. These individuals often have difficulty regulating emotions, and they struggle with a persistent sense of fear or insecurity.

How do these system factors come into play when developing support plans for individuals?

Our support plan must prioritize addressing the systemic factors influencing challenges stemming from weak attachment, which may result from early learning difficulties (e.g., family, culture, socio-economic factors). This involves creating a tranquil and secure environment in which the individual feels at ease. Additionally, we should ensure that caregivers maintain a calm and stable demeanor while consistently offering support and interaction in a supportive manner.

Alternatives to Punishment: Solving Behaviour Problems with Non-Aversive Strategies and ideas from "Gentle Teaching"

PSA incorporates principles described by Donnellan and Lavigna (1986) and later John McGee's "Gentle Teaching" (1987) as a teaching approach. As such, it emphasizes the importance of teaching others to feel safe and engaged through repeated acts of caring. According to McGee (Van de Siepkamp et al, 2018) Gentle Teaching is:

> "…..about building reciprocal relationships between people, where the reciprocity is spontaneous and based on unconditionality and equality". This paradigm is based on a psychology of human interdependence and asks caregivers to interact with those they support with warmth and caring.

The Positive Systems approach reinforces these principles of teaching the people we support to feel safe and engaged while learning and behaving. Interestingly, the Gentle Teaching model is often viewed as antithetical to traditional behaviour management approaches because Gentle Teaching eschews any use of aversive (punishment), controlling techniques and views the application of behavioural strategies as mechanistic and dehumanizing. In our opinion, this is a common myth and, in fact, when positive behavioural approaches are used properly, they are done with enthusiasm and warmth. Gentle Teaching proponents also argue that they will work with individuals who have a number of complex challenging behaviours, where it is difficult to know where and how to begin helping them. We would argue that with a comprehensive functional analysis and behavioural assessment, it is not difficult to determine the best way to work with challenging individuals and complex behaviours. Opponents of ABA also suggest that behavioural approaches force the caregiver into a position of power and authority and note that it is better to work together with clients to establish and work towards mutually agreed upon goals. We believe that any approach is going to work best when a strong therapeutic alliance is formed and the client is on board and comes to a consensus in agreeing on behavioural change goals.

We believe that opponents of ABA are at least partly correct in identifying that many of the people that we support with intellectual disabilities, and exhibit complex behavioural challenges, have never really bonded with people – and, in fact, may even have had a serious attachment disorder due to early institutionalization or lack of bonding with a loving parent in their formative years. A strongly humanistic approach really emphasizes the "positive value of human presence, participation and reward".

McGee, for one, argues that learning socially desirable behaviours proceeds through the 3 phases of Human Presence, Human Participation and Interaction and Human Reward. Let's examine each of these in more detail and see how they fit into Positive Systems Approach:


Learning
HUMAN PRESENCE: Gentle Teaching notes that human presence should signal safety, security & reward, rather than frustration, punishment or threat. Positive Systems Approach (PSA) supports this, and we agree that, for many of the individuals that we support with challenging behaviours, they have come to associate human interaction with negative consequences – and, thus, they have learned to avoid people – often by using their behaviours to avoid interaction or task completion. PSA emphasizes the importance of positive human interaction, full of non-contingent reinforcement and stimulation. Over time, it is gratifying to come and see these individuals start to look forward to human interaction and actually seek it out.
HUMAN PARTICIPATION & INTERACTION – Gentle Teaching notes that rewards come from our interactions and participation with other people. PSA argues that, in fact, for many of the people that we support, they do not get enough human interaction/participation – largely, because of impoverished environments and display of challenging behaviours that they have used to avoid having to interact with others. PSA talks about the importance of perseverance through challenging behaviours and overcoming these walls that have been erected so that the individual can eventually learn that interactions signal pleasure and are something to be sought out.
HUMAN REWARD – Gentle Teaching posits that the motivation for social beings to interact with each other comes from a sense of pleasure from being in contact with others and this should be the result of the majority of all our interactions. They also argue that behaviour change is not something to be done to somebody, it is something we attempt to do with somebody. It is a two-way affair that can either strengthen our humanity, or weaken it. PSA also stresses this through the importance of "rapport" and recognizing that any relationship should be mutual and recognize that we may learn and benefit from this relationship just as much as the individual we are trying to help.

Study Questions

1) What are some of the components of Applied Behaviour Analysis (ABA) that PSA relies heavily upon?

2) Aside from behavioural components, what are some of the "other" factors that PSA recommends should be identified? Do you feel that these are important and, if so, why?

3) List at least 4 different ways that trauma can be manifested in individuals and perhaps be mistaken for "behaviour" that requires intervention:

4) What is one of the areas that Positive Systems Approach deviates from traditional ABA theory and do you feel that this is warranted?

5) In terms of identifying relevant triggering and maintaining variables for challenging behaviours, aside from the aspects that ABA considers, what other factors does PSA consider important in terms of explaining the origin and maintenance of the behaviour. Do you agree with these, and can you think of any other factors that might be relevant?

6) List the various problems associated with using punishment-based approaches. Why do you think it is important to avoid these types of approaches in supporting individuals with behavioural challenges in community settings?

7) Do you think it is appropriate to use ABA approaches without a full consideration of systemic variables that could be coming into play? What are the dangers of not considering system factors and taking steps to address those?

8) What aspects of Gentle Teaching does PSA adopt and where does PSA differ?

Chapter 4: Laying the Groundwork for PSA

We have found over the years of teaching PSA, that before getting into the nuts and bolts, we must first address attitudes that may hinder understanding and acceptance of the principles inherent in PSA. In the 2-day PSA workshop that we conduct with caregivers, front-line staff and managers, we spend a large amount of time on the first day just addressing certain attitudes that might prevent proper implementation of PSA. The way that we address these various areas is listed below:

Aspects Of A Healthy Relationship

We asked participants, in a large group format, to list the various aspects that they considered necessary in a "healthy relationship". The instructor would then write these down on a flip chart or whiteboard. Typically, the list would include aspects such as:

- ⇒ honesty
- ⇒ trust
- ⇒ communication
- ⇒ give and take
- ⇒ humour
- ⇒ equality
- ⇒ respect

Then we ask the participants if they would accept this same list of attributes in their relationship with the person(s) that they support. People often present barriers to accepting these types of attributes in their relationship to the vulnerable individual that they supported, noting things like "communication deficits" preventing open

and full communication - or "cognitive deficits" that prevent a full disclosure of information regarding the support plan. The instructor would then lead a discussion around ways to overcome these barriers to try and create an environment where these attributes of a healthy relationship could be brought into play as much as possible with the people we support.

Role Of The Support Person

In the next exercise, we would ask participants to list words that describe or define their role vis a vis the people that they support. This list would be presented on an overhead and would typically include roles such as:

⇒ **teacher,**
⇒ **trainer,**
⇒ **advocate,**
⇒ **parent surrogate,**
⇒ **friend,**
⇒ **companion**

We then have the participants define each of these roles and then discuss objections and disagreements between participants. It is not uncommon for people to see themselves strictly as "teachers/trainers" and this type of role identification can sometimes imply that they preferred a more "authoritarian" type of relationship which creates control issues and a power imbalance. This could also come into play with those who viewed their role as primarily that of a "parent surrogate" – although, on the other hand, it could also create issues around appropriate boundaries. Even worse, some vulnerable individuals may have certain unresolved issues regarding their parents or are used to interacting with them in inappropriate ways (i.e. – demanding, avoidant, etc.), creating a whole new set of problems in the caregiver relationship. For those participants who tended to view their roles primarily as a "friend" or "companion", we would challenge them to look more closely at what type of relationship they typically have with friends or companions. This often involves a type of reciprocity (i.e. – calling a friend up to go out to a movie on a Friday night) that is not typical in a paid caregiver type of role. Furthermore, if true friendships are created, then what happens when that paid caregiver goes onto a new

"job" or relocates to another city. Unfortunately, many individuals that we support often have issues regarding feelings of abandonment and low self-esteem and this is only heightened when their paid "friends/companions" often leave them for professional reasons.

After having discussed the role of the caregiver – we spend some time also talking about the role of the intellectually impaired person and how they fit into society. Rosow (1974) described the aged in contemporary, global-industrial society as occupying a "role less" position. The same could be said for the role of the individual with intellectual challenges as they are usually less well integrated with the structures of society and so experience role loss and subsequent declines in morale and life satisfaction.

Key points in this theory of "role less" individuals include:

1. **Exclusion:** Loss of roles excludes persons with intellectual impairments from significant social participation and devalues them. Whatever their worth as individuals, persons with intellectual impairments are socially disadvantaged because they have no real economic or political role.
2. **Status Loss:** People with intellectual impairments represents a group in society that has systematic role and status loss. People without such impairments often lead a life that is marked by steady growth or acquisition of roles and responsibilities: education, marriage, parenting, occupation, etc. While specific individuals might lose a valued role at some point in their lives – people with intellectual impairments often never have a chance to acquire any of these roles in the first place.
3. **Lack of Goals:** Because society does not specify roles for people with intellectual impairments, their lives are socially unstructured. They are often expected by others to have, minimal, if any, duties, obligations, and responsibilities. There are few standards by which they can evaluate themselves or their behaviour, and no meaningful prescriptions for new goals.
4. **Loss of Social Identity:** Role loss deprives people of their social identity. As a consequence, they may feel bored, anxious, and useless--as if their existence is futile.

Power & Control Issues

Another exercise I ask participants to do in our workshop involves having them examine power and control issues in society. Participants are asked:

In our society who has power and control? Typically, this list usually looks something like this:

⇒ men
⇒ money
⇒ educated
⇒ white
⇒ heterosexual
⇒ able bodies

This opens up a lively discuss around issues of sexism, racism and ableism. We ask the participants to consider how these trends affect minority groups in our society, and what impact does it hold for the persons we support? Are they valuable? Can they overcome the power imbalance that they have inherited? Can we impact on the thoughts and feelings of society and advocate for change?

We argue that the answer is an emphatic YES. We remind the participants to consider how advocacy has brought about tremendous change in our field over the past 50 years. 50 years ago, our society was engaging in sterilization of people with handicaps and there were various movements afoot promoting eugenics. 40 years ago, it was not uncommon for parents to place their children with handicaps into institutionalized care. 20 to 30 years ago, professionals who worked in the field of developmental disabilities widely accepted the use of aversive techniques for behaviour modification. These events have culminated in the more recent trend towards full “Integration”.

We also ask the participants to define the term “ablism”. We usually agree that there is an assumption that there is a physical standard for human characteristics that allows discrimination against those who don’t meet it. Ableism underlies the philosophy that people with disabilities are asking for special treatment when they claim their basic human rights to have access to the benefits and privileges that those

who are (temporarily) able bodied enjoy. We discuss how ableism refers to the discrimination and prejudice faced by individuals with disabilities, leading to their marginalization and exclusion from various aspects of society. It is important for them to realize that one of the most affected groups is people with intellectual disabilities as they often encounter numerous barriers that hinder their access to education, employment, social interaction, and healthcare. Our discussion is centered on the types of typical barriers faced by people with intellectual disabilities due to ableism and we highlight the importance of promoting inclusivity and understanding.

We then ask the group to consider: What barriers do persons with disabilities (power imbalances) face due to ablism? The list typically looks like this:

1. **Limited Educational Opportunities**: We discuss how ableist attitudes may lead to the belief that these individuals cannot benefit from education or that they are a burden to the education system. As a result, they may be segregated into special education classes or excluded from mainstream educational environments. The group discussion usually leads to a conclusion that this segregation can perpetuate stigma, further isolating them from their peers and denying them the chance to reach their full potential.

2. **Discrimination in Employment**: We discuss how ableist misconceptions may lead potential employers to underestimate their capabilities and potential contributions to the workplace. Prejudice and stereotypes result in hiring bias, job discrimination, and a lack of reasonable accommodations, making it difficult for individuals with intellectual disabilities to secure employment that aligns with their skills and interests.

3. **Social Stigma and Isolation**: Ableism often manifests in the form of social stigma, where people with intellectual disabilities may face ridicule, bullying, or exclusion from social gatherings. The negative attitudes of others can lead to isolation and low self-esteem, causing a detrimental impact on their mental health and overall well-being. It is essential to foster inclusive and empathetic attitudes within society to combat this type of discrimination.

4. **Inadequate Healthcare Support**: People with intellectual disabilities may also encounter barriers when accessing adequate healthcare. Medical professionals may have limited awareness of the unique needs of these individuals, leading to misdiagnoses, inappropriate treatments, or subpar care. Additionally, they might face communication challenges that hinder their ability to express their health concerns effectively.

5. **Lack of Accessibility**: The physical environment can present significant barriers for people with intellectual disabilities. Public spaces, transportation, and buildings may lack proper accessibility features, making it challenging for these individuals to navigate and participate fully in society. This lack of accommodation reinforces the notion that their needs are unimportant, adding to the sense of exclusion.

The conclusion from this discussion usually ends with the fact that ableism perpetuates the marginalization and discrimination of people with intellectual disabilities, hindering their integration into various aspects of society. We discuss how it is important than any support plan take into consideration promoting inclusive policies, providing adequate education and employment opportunities, combating social stigma, and ensuring accessibility.

The following exercise is intended to have participants examine how power and control issues can permeate their support plans if they are not aware of these dynamics. We usually divide the room into two equal groups and then hand out 2 scenarios for each group to consider and discuss.

SCENARIO A

You go to the doctor, and he advises you that you have high blood pressure and need to lose weight and quit smoking. How do you respond? Make a list of responses that the group offers.

SCENARIO B

You take a person you support to their family doctor. The doctor tells the person and you that the individual has high blood pressure and needs to lose weight and quit smoking. How do you respond? Make a list of responses that the group offers.

The ensuing reveal of the list of responses for each group typically shows a vastly different response to Scenario A as opposed to Scenario B. It is not unusual for the Scenario A group to indicate that they would take this under consideration, explore their options, perhaps get a second opinion. Some people respond that they don't automatically take what the doctor says for granted and they would purchase their own digital sphygmomanometer (i.e. – blood pressure machine) and track their own blood pressure over time to ensure that it isn't just spiking in the doctor's office. The responses for the Scenario B group are usually quite different as people tend to state that they would immediately place the individual they support on a dietary regimen and terminate their access to cigarettes. This exercise is very powerful in demonstrating the power/control imbalance in how we treat the people we support versus how we would respond ourselves or to our friends.

Next, we follow this up by asking the group to generate a list of sources that influence the likelihood of our being more controlling. This should include factors such as:

- ⇒ level of individual's competence
- ⇒ our own individual values and attitudes
- ⇒ family
- ⇒ other staff, managers
- ⇒ agency
- ⇒ society

In the discussion, it is important to highlight that power and control are two of the most significant issues in any relationship. The more trouble the relationship is facing, the more these power and control issues will come to the surface. This is particularly true when working with individuals who have challenging behaviour. The better the relationship is working, the less power and control issues will be a problem. Next, our group is challenged to come up with a list with ways that they could try and achieve a good balance in relationships and avoid power/control issues.

At the end of the exercise, we want to ensure that the list includes:

- **Bond/Rapport/Therapeutic Alliance:** develop a personal bond with the individual while connecting closely and comfortably with a high level of trust and mutual respect

- **Individuality:** find ways to allow the individual plenty of room to maintain their individuality, and permit them as much space as they need to continue being who they are as an individual

- **Sharing Resources**: working out and negotiating ways that allow them to share any resource that is limited, for example, time, money, physical energy, space, and so on.

- **Setting limits/Boundaries**: agreement about defined limits, that is what is and is not acceptable within the relationship. This is a very important part of providing each person with a continued sense of being an individual and protecting them from losing their individuality within the relationship.

- **Experiment:** a willingness to experiment, to try new ideas and solutions without a guarantee that they will work. It helps if there is acceptance that in human relationships there is no such thing as a totally failed experiment. Some useful new information will always be discovered as a result of trial-and-error experiments even if the end result shows of no immediate benefit.

- **Negotiate:** developing their negotiation (conflict resolution) skills to deal with issues of conflict. Understanding that in every negotiation it is normal for one person to want more or less than the other. Negotiation it is just grown-up way of discovering a midpoint where both parties are as comfortable as possible with the outcome.

Punishment Debate

The participants are next asked to take a position on the use of punishment approaches in their support plans. They are divided into two groups and each group is given contrasting statements to defend:

Statement A

Defend this statement: It is ethical and practical to use some forms of punishment in our work, in order to shape behaviour.

Statement B)

Defend this statement: It is unethical and not practical to ever use any kind of punishment in our work, in order to shape behaviour.

Afterwards, the groups are invited to debate each other. During the debate we ensure that we cover the following points:

How do we Define Punishment: This is defined as:

> "any consequence/event that follows a behaviour and reduces the probability that the behaviour will occur again in the future".

In behavioural terms, punishment approaches are a class of procedures involving the occurrence of a stimulus that immediately follows responding and then results in a decrease in some aspect of the response class over baseline levels. It almost always involves a procedure in which a response is followed by an "aversive" stimulus.

Punishment, therefore, is usually an interaction between a response and an aversive stimulus. Of course, we make sure to discuss the fact that one of the major problems with using aversive stimuli (aside from any ethical/moral dilemmas) employed as punishment is that it could also automatically condition any accompanying behaviour or environments through simultaneous pairing, causing these stimuli to become aversive. This can be problematic if, for instance, the punishment procedure

becomes associated with the caregivers that are implementing it. In this case, we know that punishment often elicits emotional responses as well as avoidance responding. It is hard to create a positive climate in working with an individual when the caregivers start eliciting emotional and/or avoidance responses even when they are trying to interact positively – because they've been previously associated with (and therefore conditioned by) aversive stimuli. In addition, we also have to mention that emotional reactions elicited by the aversive stimuli may interfere with the person's ability to display appropriate behaviour.

Define Aversive Stimulus: At this point, the participants will often argue about what exactly constitutes an "aversive" stimulus. This is typically defined as:

> "any negative stimulus to which an organism will learn to make a response that avoids it".

It is hard to determine what is a "punishment" or an "aversive" stimulus without reference to the person's response to it. This is because, what may be considered "aversive" to one person, could actually be "reinforcing" to another person. This sounds contradictory but consider the example of giving a "verbal reprimand" to somebody following the occurrence of some undesirable behaviour. Most people would consider this to be "aversive" and try and avoid it in the future – however, for some individuals, negative attention may be preferrable to no attention. If they are living in an environment where they are not getting a lot of interactions from peers or caregivers, then they may decide that even a "verbal reprimand" is better than being ignored. In this case, if their undesirable behaviour increases in frequency following delivery of a verbal reprimand, then it is safe to assume that this is not an "aversive" stimulus for that person and, in fact, that verbal reprimand is actually functioning as a "positive reinforcement" *(* remember that any response that results in the increased probability of that behaviour occurring in the future, means that that response was positively reinforcing for the individual*).

We cannot define anything as a "punishment" or "aversive" or even "positive reinforcement" without first evaluating that effect that that response has on the individual's behaviour.

Therefore, our discussion on "punishment" should always cover the following points:

- Punishment approaches have a poor probability of gaining informed consent by the individual. It is always important to gain informed consent from the individual and/or their advocate/guardian. It is difficult to gain truly informed consent for these types of approaches.

- Many vulnerable individuals with challenging behaviours have had a lifetime of being exposed to abuse, impoverished environments, harassment, bullying etc. Do we really want to compound these life experiences with more exposure to aversive stimuli and do we want them to associate us with these experiences?

- We need to closely consider the negative impact this type of approach might have on the individual's perception of the world and their place within it.

- We need to remember the most common negative side effects associated with punishment create significant difficulties - namely: lack of trust, impact on relationship, avoidance/escape behaviours, emotional reactivity.

- One point that many people often overlook, is the potential that punishment approaches can become overused or misused. The research tells us that when punishment procedures are applied to suppress some kind of undesirable behaviour, they often result in rapid response suppression. *(Note that this doesn't take into account the fact that "response suppression" can come at a cost – see above mentioned points*). If we are going to apply a behavioural lens to this phenomenon, it is apparent that the quick response suppression can be "negatively reinforcing" to the caregiver (*remember – negative reinforcement is defined by an aversive stimulus (the behaviour) which is removed as a result of a response – thereby increasing the probability of the caregivers punishment response being repeated more often in the future*).

- Most community settings that are supporting challenging individuals, lack any kind of rigid standards for implementing and monitoring the use of punishment approaches. There is also a lack of oversight and accountability in these settings for the use of punishment techniques.

Using the Least Restrictive Model

The next exercise we provide to the group is to answer the question: *Do you use "punishment" in your work?* When we open up this discussion, it is typical that the vast majority of the audience loudly proclaims that they never use or would even consider any type of punishment approach in trying to address challenging behaviours in the people they support. This leads to asking them to consider possible ways that punishment can be disguised. For example – consider:

- ⇒ refusing an outing that had been scheduled.
- ⇒ taking away personal property.
- ⇒ "Natural Consequences" excuse (e.g. – they threw their food while eating, therefore their meal was taken away and rationalized as "this was a natural consequence".
- ⇒ sending an individual to their room and closing the door behind them following an inappropriate behaviour.

All of these could be considered "aversive" consequences and involve things like not delivering positive events that had been promised, using "time out" (i.e. – removing the person from opportunity for positive reinforcement). These types of responses are not uncommon in many settings that we have consulted in – and they are often done without any recognition that they involve systematic use of a punishment-based approach – therefore, lack any standards for applying it, evaluating its effectiveness, obtaining informed consent or consideration of ethical violations (e.g. – taking away meals).

The point of this exercise is to have participants come to understand that punishment-based approaches are all around us and realize that we need to become much more aware of this and elevate our own competence in using strictly positive based approaches that also take into account necessary systemic changes which can lead to positive changes all by themselves.

Now that we've laid the groundwork that should open minds up to being more accepting of a Positive Systems Approach, the next chapter will outline the details of what this constitutes.

Study Questions

1) List some of the barriers that people with disabilities face due to ablism. Why do you think that it is important to recognize and understand this when developing support plans?

2) What are some ways that we can ensure that we've considered and addressed potential power and control issues in our support plans?

3) What is the difference between "punishment" and "aversive stimulus"? Can you have one without the other?

4) List at least 3 reasons why punishment approaches should not be considered in support plans.

5) Think about support plans that you might have been involved with in the past. Now that you know more about punishment theory and "aversive consequences", do you think that these could have been avoided in your previous support plans and, if so, how?

Chapter 5: Positive Systems Approach – Individual Factors

As previously mentioned, PSA is divided into both Individual Factors and System Factors. Let's first examine the 7 Individual Factors:

Individual Factors:

1) IDENTIFICATION/ASSESSMENT

This first component involves defining who the person is and identifying their strengths and their needs. What areas of their lives are currently creating problems for them or for others. In order to do this, we first have to take a close look at the history for that person (e.g. - family, institutional life, previous trauma). Why is this important? Many ardent behaviourists would argue that it is not important to know anything about previous history, including family dynamics, life experience or trauma history. These behaviourists often prefer to focus strictly on observable and measurable behaviours in the present context. They contend that the efficacy of behavioural change programs relies only on a good understanding of the immediate triggers and consequences that influence an individual's actions. They would argue that we only need to focus on the here and now, with assessments that identify specific environmental cues and reinforcements that shape behaviour, allowing for precise interventions and targeted strategies. Their approach involves controlled manipulation of current conditions, leading them to emphasize the importance of analysing and modifying the immediate environment over extensive exploration of an individual's past experiences. They would also argue that we can't have a reliable accounting of past events (as they are no longer observable or measurable), so we are really wasting our time focussing on unreliable information that has little bearing on the here and now.

We prefer to go beyond a strict behavioural interpretation and take a comprehensive approach in understanding an individual's history, including their family dynamics, life experiences, and trauma history, in order to provide effective and holistic treatment. From this viewpoint:

> conducting a thorough history serves as a crucial foundation for accurately assessing the root causes of psychological challenges and developing tailored interventions.

Terry has developed a thorough outline for the taking of a person's history, which is useful for parents, caregivers and clinicians to have, especially for those clients who cannot articulate their own history, and even more so for those whose lives have been significantly spent in institutions, such as adoptive or foster care homes, group homes, or other congregate care facilities, where such history can be easily lost. It can be downloaded from the website (www.drbobcarey.com) as "Biography – Blank Form.docx". As a MS Word document, it can be used to format and record a person's biography and important historical record.

We have learned that, by delving into an individual's past, clinicians can identify:

- ⇒ potential triggers,
- ⇒ recurring patterns,
- ⇒ possible motives being pursued using the behaviour,
- ⇒ and unresolved traumas that may significantly impact the person's current mental well-being.

Family dynamics and life experiences offer valuable insights into an individual's coping mechanisms, interpersonal relationships, and learned behaviours, enabling clinicians to create nuanced and empathetic therapeutic approaches, even for those approaches that offer behaviour support plans. We have found that acknowledging and addressing trauma history, in particular, is vital not only for fostering healing and resilience, it also helps us learn what type of support system will best foster a sense of safety and trust. In essence:

A comprehensive understanding of an individual's history equips mental health clinicians with the necessary tools to provide effective, person-centered care that encompasses both the past and present facets of an individual's psychological health.

Other factors that are often overlooked include possible medical concerns that need to be identified. In the book chapter that Dr. Carey wrote with Dr. Bob King (King & Carey, 2002) entitled: *"Collaborative Treatment Approaches: Integrating medication with nonpharmacological treatments",* we emphasized that:

Challenging behaviours in and of themselves are not disorders or illness, but rather potential overt symptomatic expressions of a variety of underlying etiologies. The following table provides examples:

- **Affective disorders** – These types of disorders (e.g. – Generalized Anxiety Disorder, Major Depressive Disorder) are known to increase the risk of aggression in the context of an irritable or dysphoric mood.

- **Hypomanic or manic phases of a Bipolar Disorder**: A byproduct of bipolar disorder during the manic phases is disinhibition, which often causes the individual to act in a way that is out of character. They can be very impulsive and engage in risky behaviours during these cycles of their Bipolar disorder.

- **Panic Disorder, Social Phobia and Generalized Anxiety Disorder**: These disorders often produce attempts by the individual to avoid or withdraw from anxiety-provoking environments or interpersonal interactions. Again, aggression or self-injury may result in this context.

- **Post Traumatic Stress Disorder**. This disorder is associated with dissociative phenomena, flashbacks and hyperarousal in the context of post-traumatic stress disorder. This can also increase the risk of aggression being exhibited.

- **Obsessive Compulsive Disorder**: Many individuals with Autism Spectrum Disorder may have a comorbid Obsessive Compulsive Disorder – or, at the very least, engage in a lot of OCD types of behaviours. When they are interrupted from completing their compulsions it can often produce aggression.

- **Tourette's Syndrome, ASD**: Rage outbursts in individuals with Autism Spectrum Disorders (ASD) and Tourette's syndrome are quite common. Once again, they often have strong obsessive-compulsive tendencies and can become very irritable and angry when this is interfered with.

The following table lists typical behavioural presentation symptoms that are actually a product of the manic or depressive cycles of a Bipolar Disorder in persons with intellectual challenges.

Signs and Symptoms of Hypomania and Depression

Mania	***Depression***
• nonstop hyperactivity (e.g., pacing, rocking) • knocking over or throwing objects repeatedly • bringing same object to staff repeatedly • disrupted sleep (< 4 hours sleep at night time) • new words, improved expressive speech • euphoric, loud and intense pronounced laughing	• hand biting leaving mark on skin • crying • public masturbation • laying in fetal position • inactivity – remain in one place for extended periods > 1hr • disinterest in TV, eating, outings
Physical aggression (e.g., hitting and/or pushing) urinating in odd places (e.g., the laundry basket) and incontinence are also followed but seem to be present during both phases.	

In addition to behavioural types of issues that accompany these mental health disorders, Dr. King pointed out in our book chapter that we must also be aware of side effects to medications. For example:

Antidepressants

(a) *Selective serotonin reuptake inhibitors* - through altering the transmission of the neurotransmitter serotonin, this class of medication also is used in the treatment of (i) panic disorder, (ii) OCD, (iii) social phobia, and (iv) bulimia. Adverse effects include sexual dysfunction, nausea, vomiting, headache, insomnia and a paradoxical increase in anxiety.

(b) *Tricyclic antidepressants* - Examples include Amitriptyline (Elavil), Imipramine (Tofranil), Sinequan (Doxepin), Clomipramine (Anafranil). As older medications with multiple influences on neurotransmitters, these drugs are generally poorly tolerated in individuals with intellectual impairments. Common adverse effects include sedation, tremor, constipation, dry mouth, blurred vision and orthostatic hypotension. These adverse effects often prevent the attainment of a therapeutic dose of the drug.

> These types of behavioural manifestation of various mental health disorders and side effects to medications should be viewed as "symptoms" as opposed to behavioural excesses that need to be targeted for "modification".

A Positive "Systems" approach recognizes the importance of identifying these symptoms as such and then treating the underlying issue (i.e. – mental health disorder, addressing side effects to medication). Terry has created a "checklist" of mental health disorders known to affect people with developmental disabilities, which can be downloaded from the website (www.drbobcarey.com) as "Mental Health and Developmental Disability.pdf" which can be used as a screening tool when making an assessment. Also, he has created a "checklist" of Brain-Behaviour symptoms that in his opinion are common among people with developmental disabilities. This can also be downloaded from the website as well, as "Brain-Behaviour Relationships.pdf", to use as a screening tool when making an assessment. Finally, we recommend the website of Dr. John Coombs, and particularly his "Functional Medicine as a Matrix" document which lays out 18 health checks to investigate or implement to ensure an optimally functioning body and mind from a medical point of view: https://www.drcoombs.ca/functional-medicine-matrix.html

In other words, PSA looks beyond the overt topography of the behaviour, and focuses also upon identifying:

- ⇒ biological,
- ⇒ social,
- ⇒ affective,
- ⇒ environmental factors

These factors can combine to initiate, sustain, accelerate, decelerate,or end the behaviour in question.

After having considered all the above-mentioned factors that could be driving and maintaining behaviour, the next step in "identification" is to conduct a thorough functional analysis of the behaviour in question. In our opinion, this is where applied behaviour analysis shines! It is important to realize that, in conducting this type of

detailed analysis, the *functions* of behaviour are not usually considered inappropriate. Rather, it is the behaviour itself that is judged appropriate or inappropriate. For example, we can determine through a behavioural assessment that a person is seeking attention by acting-out, then we can develop a plan to teach the person more appropriate ways to gain attention, thereby filling the person's need for attention with an alternative behaviour that serves the *same function* as the inappropriate behaviour. At the same time, strategies may be developed to decrease or even eliminate *opportunities* for the person to engage in behaviour that hinders positive growth (e.g. by changing the environment to minimize opportunities to aggress towards others).

CONDUCTING A FUNCTIONAL ANALYSIS THROUGH BEHAVIOURAL ASSESSMENT

Applied Behaviour Analysis is unparalleled when it comes to assessment as a means of identifying triggering and maintaining variables for behaviour. In addition, behavioural assessment is a critical tool for measuring treatment effectiveness and documenting this in order to be accountable for any resource allocations. Let's go over some of the basics involved in conducting a proper behavioural assessment:

Baseline Measurement:

Before we even consider implementing any type of support plan aimed at changing behaviour, we should collect what is referred to as a "baseline measurement" of the individual's behaviour. This is the only way that we can measure the impact of our support changes on what was occurring before the changes. This requires coming up with "operational definitions" of the behaviours that we are going to measure.

An **operational definition** is a clear and precise description of a target behaviour in observable and measurable terms. It specifies the actions, responses, or characteristics that define the behaviour being assessed, allowing for objective and consistent measurement.

If descriptions of behaviours are vague (e.g., Johnny has a "poor attitude"), it is difficult to determine appropriate interventions.

It may be necessary to observe the person's behaviour carefully and objectively in different settings and during different types of activities, and to conduct interviews with other staff and caregivers, in order to pinpoint the specific characteristics of the behaviour.

Here are key elements of an operational definition:

- **Observable Behaviour**: The behaviour being assessed must be something that can be directly observed and measured. It should be specific and concrete, avoiding vague or subjective terms. For instance, we have seen some pretty poor operational definitions – for example: "aggression" defined as: *"... any time that Johnny gets aggressive with other people in his immediate area".*

This example does not define what is meant by "aggressive":

⇒ Is it "verbal", "physical"….

⇒ Does it involve pushing, shoving, striking….

⇒ Does the frequency of the aggression matter?

⇒ Does the intensity matter? (e.g. – light push versus hard hit with closed fist)….

⇒ Does the duration matter? (e.g. – a shove that only lasted a micro-second vs sustained and repeated blows).

⇒ Do we have to take into account the latency of the behaviour (i.e. – how long between incidents of "aggression" before we count it as 2 incidents rather than 1 longer incident?

⇒ What is meant by "immediate area" – what if Johnny goes out of his immediate area and strikes somebody…. What if Johnny picks up an object and hurls it at somebody outside his "immediate area".

You can see how tricky it can be to specify all the important elements of the behaviour. Why is this so important you might ask?

Having a good operational definition of the "target behaviour" is essential to achieving one of the core system elements – namely, "Consistency".

If we can't get everybody to agree on what an incident of "aggression" actually is, then caregivers are going to respond differently to their interpretation of what they felt actually constituted an incident of aggression. Different responses to the behaviour will ultimately result in either a failure to achieve behaviour change or – at the very best, end up taking a lot longer to achieve the desired results.

How do know if we have a good "operational definition" of the behaviour that we would like to see changed? This is where the concept of "reliability" comes into play.

A "reliable" operational definition of target behaviour can be determined by having 2 or more observers recording that behaviour over a period of time.

If, after a week or so of having the same 2 observers independently record (i.e. – they don't watch each other or compare notes) aspects of the behaviour (e.g. – frequency, intensity, duration, latency), and we have 100% agreement on these measures, then we know that we have achieved excellent "inter-observer reliability" and have a well-defined target behaviour to start collecting our baseline data. Typically, if we can achieve even 80% agreement or better that is a good sign that we're ready to go – perhaps with only a bit of minor tweaking on the parts of the operational definition where the observers tended to disagree.

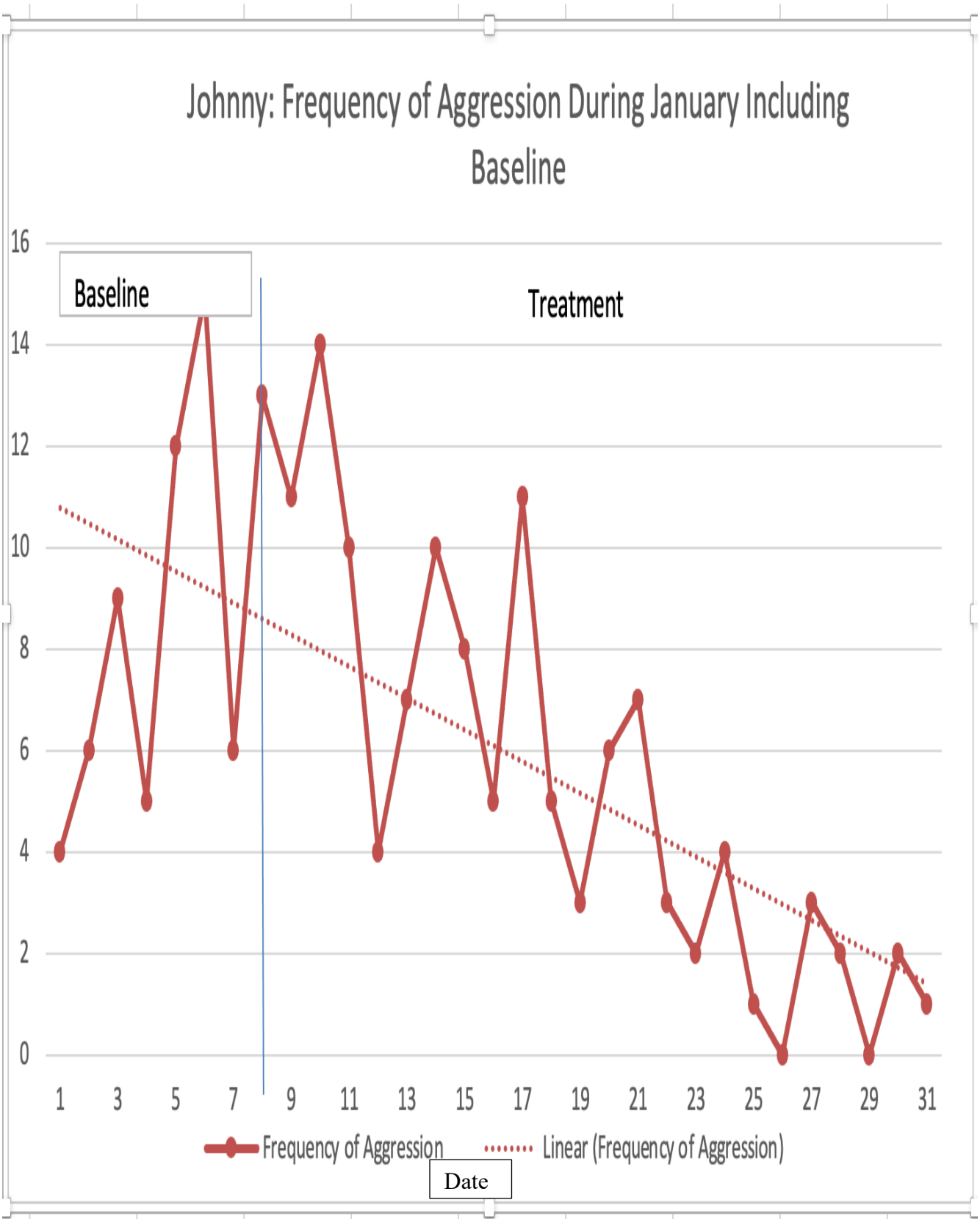
- **Contextual Details**: It is also a good idea for our operational definition to include contextual information about the behaviour, such as the setting, people involved, or specific conditions under which the behaviour occurs. The more specificity the better to ensure consistency in our observations. Furthermore, this type of data can be instrumental in our analysis of the data as we may see important trends and patterns in the data (e.g. – the behaviour occurs much more frequency in one setting versus another, or with particular caregivers and not others).

- **Exclusions**: Sometimes it is valuable to also include clarification regarding what types of behaviours would be excluded from the operational definition. For instance, with Johnny we may decide not to include instances of light shoving when he is trying to get around a person that is standing in his way. This type of exclusionary criterion helps eliminate ambiguity and ensures that observers have a clear understanding of what to look for and what to ignore.

After we have arrived at a reliable operational definition, we are ready to start collecting our **baseline data**.

Baseline data helps us determine the severity of the problem, establish goals, and track our progress over time.

It's always advisable to take the data that we've collected and transfer it to a graph as this visual reference makes it easy to determine patterns and progress over time. For instance, a simple graph (made using Microsoft Excel) charting the frequency of Johnny's aggression over a one-month period might look like the example on the next page. Remember that, depending on what data you are collecting, you could have several other graphs charting different aspects of the target behaviour (e.g. – frequency, intensity, duration, setting, caregivers involved, etc…). The graph on the following page shows a nice treatment effect in reduction of the frequency of aggression over a one-month period along with a considerable improvement compared to the baseline period. The addition of a trendline shows us the rate of improvement.


Johnny: Frequency of Aggression During January Including Baseline
Baseline
Treatment
16
14
12
10
8
6
4
2
0
1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
31
Frequency of Aggression
Linear (Frequency of Aggression)
Date

Measuring Treatment Integrity

Behavioural assessment includes monitoring the effectiveness of our support plan, which tells us whether or not it is working as intended. If things aren't going as planned, then it's possible that:

a) Our functional analysis conclusion about the function of the behaviour is wrong and we need to go back and have another look at other possible functions.

b) The written protocols that we developed explaining how best to support an individual in order to prevent occurrences of the problematic behaviour and/or how to deal with it when it is occurring are not being followed the way that they were intended. This can be due to a number of factors such as:

   ⇒ poor operational definition of the behaviour so that caregivers don't respond consistently,
   ⇒ systemic factors such as poorly trained caregivers,
   ⇒ insufficient resources (i.e. – staffing, alternative activities to distract and re-direct the individual at the start of the behaviour),
   ⇒ environment is a poor match with the individual (i.e. – there may be a lot of triggering events/people in that environment that have not been controlled for).

Data Collection and Analysis

As previously mentioned, behavioural assessment involves collecting data on the target behaviour(s) throughout the baseline and treatment process. The most common method employed involves **direct observation**. This involves having individuals directly observe the individual and make notations on a data recording sheet regarding the salient aspects of the behaviour (e.g. – frequency, intensity, duration) and, perhaps, other important aspects surrounding the behaviour (e.g. – which caregivers are involved, peers that might be involved, time of day, event that was occurring at the time, etc.). An example of this type of recording sheet is provided on the following 2 pages:

Data Recording Sheet: John Smith

Operational Definition: Physical aggression (PA) – defined as: "any time that Johnny achieves unwanted physical contact for l second or longer towards another individual with sufficient force to cause discomfort".

Types of PA: This can involve:

⇒ hitting (striking another with open or closed hand),
⇒ kicking (lashing out with his feet to make unwanted contact with another),
⇒ pinching (grabbing a part of the body of an individual and squeezing).

Latency: A single instance of PA (physical aggression) is considered to have occurred no matter how short duration it was and if there is 10 seconds latency between instances. If latency between instances is less that 10 seconds, then it is considered an ongoing instance, and the total duration of each instance should be measured or estimated.

Intensity: Record the intensity (severity) of each instance on a 3-point Likert scale

⇒ 1=severe (causing injury to other),
⇒ 2=moderate (causing just slight injury – e.g. slight red mark),
⇒ 3=mild (causing no visible injury to other).

Duration: Record the duration of each discrete instance in total seconds.

Sample Data Recording Sheet

Date	**Type**							
	Hitting	*Kicking*	*Pinching*	*Time of day*	*Event*	*Caregiver involved*	*Intensity (Rating of 1-3)*	*Duration (in seconds)*
July 1	√			9 a.m.	breakfast	Peter, June	3	5
July 2		√		11 a.m.	walk	Peter	3	3
July 3	√			2 p.m.	walk	Peter	2	3
July 3		√		4 p.m.	walk	Peter	2	3
July 4			√	7 a.m.	a.m. hygiene	Fran	2	1
July 5	√			7 a.m.	a.m. hygiene	Fran	1	12
July 5		√		7:30 a.m.	a.m. hygiene	Fran	2	1
July 5	√			8 a.m.	a.m. hygiene	Fran	1	10
July 9		√		9 a.m.	breakfast	Sean	3	1
July 10	√			10 a.m.	Car ride	Mary	3	3
July 11		√		7 a.m.	a.m. hygiene	Fran	1	1
July 11		√		7:30 a.m.	a.m. hygiene	Fran	1	1
July 13	√			8 a.m.	a.m. hygiene	Fran	1	5
July 17			√	5 p.m.	Dinner	Peter	3	1
July 17		√		5:30 p.m.	Dinner	Peter	3	1
July 19	√			6 p.m.	Dinner clean up	Peter	3	5
July 22			√	9 a.m.	Breakfast	Sean	2	1
July 22	√			9:30 a.m.	Breakfast cleanup	Sean	3	10
July 25		√		8 a.m.	a.m. hygiene	Fran	2	1
July 26	√			9 a.m.	Breakfast	Fran	1	2
July 28			√	8 a.m.	a.m. hygiene	Fran	1	1
Total	9	8	4					
Avg Intensity							2	

With the data shown above, we could easily graph the 3 different types of Physical Aggression along with measures such as average intensity for the month and, perhaps, also graph duration of each type of PA. When examined more closely we can already see some important patterns to the behaviour – for instance, most instances are occurring early in the morning and involve one caregiver more than anybody else (i.e. – Fran).

Treatment Outcome Evaluation: By comparing the data collected during our support plan with the baseline measurements, it becomes possible to evaluate outcomes. This evaluation involves analysing the changes in behaviour that occurred as a result of the support plan. If the target behaviour(s) have significantly improved or reached predetermined goals, it suggests that the treatment has been effective.

Maintenance and Generalization: Behavioural assessment can also assess the maintenance and generalization of treatment effects. These assessments help determine the durability and real-world effectiveness of our support plan.

Maintenance refers to the extent to any improvements are sustained over time, while **generalization** refers to the transfer of behaviour change to different settings, people, or situations.

This type of data can be used to justify any additional resources that have been provided to help support the individual and will also tell us whether or not we need to modify our plan and then monitor progress objectively. This is one of the best aspects of applied behaviour analysis in that it gives us a systematic and empirical approach to evaluating the effectiveness of what we are doing.

Once the problem behaviour has been defined concretely, the team can begin to devise a plan for conducting a functional behavioural assessment to determine functions of the behaviour. The following discussion can be used to guide teams in choosing the most effective techniques to determine the likely causes of behaviour.

When considering problem behaviours, teams might ask the following questions.

Is the problem behaviour linked to a skill deficit?

Is there evidence to suggest that the person does not know how to perform the skill and, therefore cannot?
Persons who lack the skills to perform expected tasks may exhibit behaviours that help them avoid or escape those tasks. If the team suspects that the person "can't" perform the skills, *or has a skill deficit,* they could devise a functional behavioural assessment plan to determine the answers to further questions, such as the following:

- **Does the person understand the behavioural expectations for the situation?**
- **Does the person realize that he or she is engaging in unacceptable behaviour, or has that behaviour simply become a "habit"?**
- **Is it within the person's power to control the behaviour, or does he or she need support?**
- **Does the person have the skills necessary to perform expected, new behaviours?**

Does the person have the skill, but, for some reason, not the desire to modify his or her behaviour?

Sometimes it may be that the person can perform a skill, but, for some reason, does not use it consistently (e.g., in particular settings). This situation is often referred to as a "performance deficit." Persons who can, but do not perform certain tasks may be experiencing consequences that affect their performance (e.g., their non-performance is rewarded by peer attention, or performance of the task is not sufficiently rewarding). If the team suspects that the problem is a result of a *performance deficit*, it may be helpful to devise an assessment plan that addresses questions such as the following:

- **Is it possible that the person is uncertain about the appropriateness of the behaviour (e.g., it is appropriate to clap loudly and yell during sporting events, yet these behaviours are often inappropriate when at work)**
- **Does the person find any value in engaging in appropriate behaviour?**
- **Is the behaviour problem associated with certain social or environmental conditions?**
- **Is the person attempting to avoid a "low-interest" or demanding task?**
- **What current rules, routines, or expectations does the person consider irrelevant?**

Techniques for Conducting the Functional Behavioural Assessment

Indirect assessment. *Indirect* or *informant assessment* relies heavily upon the use of structured interviews with people who know the individual well. Individuals should structure the interview so that it yields information regarding the questions discussed in the previous section, such as:

- In what settings do you observe the behaviour?
- Are there any settings where the behaviour does not occur?
- Who is present when the behaviour occurs?
- What activities or interactions take place just prior to the behaviour?
- What usually happens immediately after the behaviour?
- Can you think of a more acceptable behaviour that might replace this behaviour?

Direct assessment. *Direct assessment* involves observing and recording situational factors surrounding a problem behaviour (e.g., *antecedent* and *consequent* events). An evaluator may observe the behaviour in the setting that it is likely to occur, and record data using an Antecedent-Behaviour-Consequence (ABC) approach.

Regardless of the tool, observations that occur consistently across time and situations, and that reflect both quantitative and qualitative measures of the behaviour in question, are recommended.

Data analysis. Once you are satisfied that enough data have been collected, the next step is to compare and analyze the information. This analysis will help the team to determine whether or not there are any patterns associated with the behaviour (e.g.,

whenever Trish does not get her way, she reacts by hitting someone). If patterns cannot be determined, the team should review and revise (as necessary) the functional behavioural assessment plan to identify other methods for assessing behaviour.

Hypothesis statement

Drawing upon information that emerges from the analysis, the team can establish a hypothesis regarding the function of the behaviours in question.

This hypothesis predicts the general conditions under which the behaviour is most and least likely to occur (antecedents), as well as the probable consequences that serve to maintain it.

For instance, should a staff report that Lucia frequently makes a screeching noise during work, a functional behavioural assessment might reveal the function of the behaviour is:

⇒ to gain attention (e.g., verbal approval of peers),

⇒ avoid interaction from peers who may intrude on her personal space;

⇒ seek excitement (i.e., external stimulation),

⇒ or both to gain attention and avoid a low-interest activity.

Only when the function of the behaviour is known is it possible to establish an individual support plan. ***In other words, before any plan is set in motion, the team needs to formulate a plausible explanation (hypothesis) for the person's behaviour.*** It is then desirable to manipulate various conditions to verify the assumptions made by the team regarding the function of the behaviour.

2) INDIVIDUAL FACTOR#2: LOOKING AT BEHAVIOUR AS COMMUNICATION

Now we attempt to look at the "function" of the behaviour or why the behaviour is occurring. All "behaviour" should be viewed as a form of communication, and it is up to us to determine what that behaviour is communicating.

Setting the Stage for Accepting Behaviour as Communication

When conducting a group exercise, we will ask the participants to list the various reasons for:

What might behaviour be communicating?

Ie : John acts out against a peer every day, while at the workshop?

Generate possible communicative functions of that behaviour:

The list typically looks like this:

- ⇒ **Boredom**: possible communicative function: under stimulated
- ⇒ **Lack of skill**: possible communicative function: improper instruction
- ⇒ **Avoidance**: possible communicative function: avoid human interaction, lack of social skills, not enjoying the work
- ⇒ **Overstimulated**: too noisy in environment: possible communicative function: overstimulated
- ⇒ **Not having a basic need met**: basic need, hunger, pain, personal space, tired

In the next exercise, we deal with subjective labels that can be put on people that might prevent us from seeing their behaviour as a form of communication. We ask the group to consider the statement:

"Some people are simply lazy or unmotivated".

We ask the group to consider the question:

Why might someone appear to be unmotivated? Example: Susan refuses to attend work every day.

The list that is typically generated usually looks like this:

- ⇒ health reasons that might cause pain or limit enjoyment
- ⇒ toxins in the environment that may be stimulating allergic or immunologic reactions
- ⇒ fear of the activity
- ⇒ lack of understanding regarding how to do the activity
- ⇒ activity is not rewarding
- ⇒ activity is stressful

Why is it important to look at behaviour as communication? Some people might argue that "behaviour is behaviour" and if you apply the principles of applied behaviour analysis you should be able to modify that behaviour without having to figure out possible communicative functions or previous issues in the person's history that might be contributing to the behaviour. Here are several reasons why we argue that this 2nd individual component of PSA is absolutely essential:

1. **Effective Intervention Design:** Understanding the communicative function of a behaviour helps in designing an intervention that directly addresses the underlying cause. If you only address the outward behaviour without considering its purpose or intent, the intervention may not be effective in changing the behaviour in the long term.

2. **Preventing Misinterpretation:** Misinterpreting the communicative function of a behaviour can lead to inappropriate or ineffective interventions. For example, if an individual is engaging in disruptive behaviour to escape a challenging task, punishing the behaviour without addressing the task's difficulty may exacerbate the issue.

3. **Individualization:** Different behaviours may serve different purposes for different individuals. By identifying the specific communicative function, interventions can be tailored to the unique needs of the person, increasing the likelihood of success.

4. **Long-Term Behaviour Change:** Addressing the underlying function of a behaviour often leads to more lasting behaviour change. Simply suppressing a behaviour without addressing its cause may result in the behaviour re-emerging or being replaced by another problem behaviour.

5. **Respect and Dignity:** Understanding the communicative function promotes a respectful and empathetic approach to behaviour intervention. It acknowledges that the individual is communicating their needs or emotions through their behaviour, rather than simply being "bad" or "disruptive."

6. **Positive Behaviour Support:** A functional assessment of behaviour, focusing on its communicative function, is necessary to enhance an individual's quality of life by teaching alternative behaviours that fulfill the same communicative function in a more socially acceptable way.

7. **Skill Building:** Interventions that target the communicative function can involve teaching the individual new skills to express themselves effectively. For example, a nonverbal individual might engage in challenging behaviour to request items; teaching them a communication system can replace the problem behaviour.

8. **Collaborative Approach:** By involving caregivers and other relevant stakeholders in understanding the communicative function, interventions can be developed collaboratively, drawing on a range of perspectives and expertise.

In essence, considering the communicative function of behaviour provides a more holistic and comprehensive approach to behaviour intervention, promoting understanding, empathy, and positive change.

Let's next examine what are the ***typical primary functions of behaviour***. They can usually be categorized under the following headings:

***Request* - They may be requesting:**

⇒ Attention
⇒ Help
⇒ Object
⇒ Action
⇒ Social Interaction

Protest... They may be protesting:

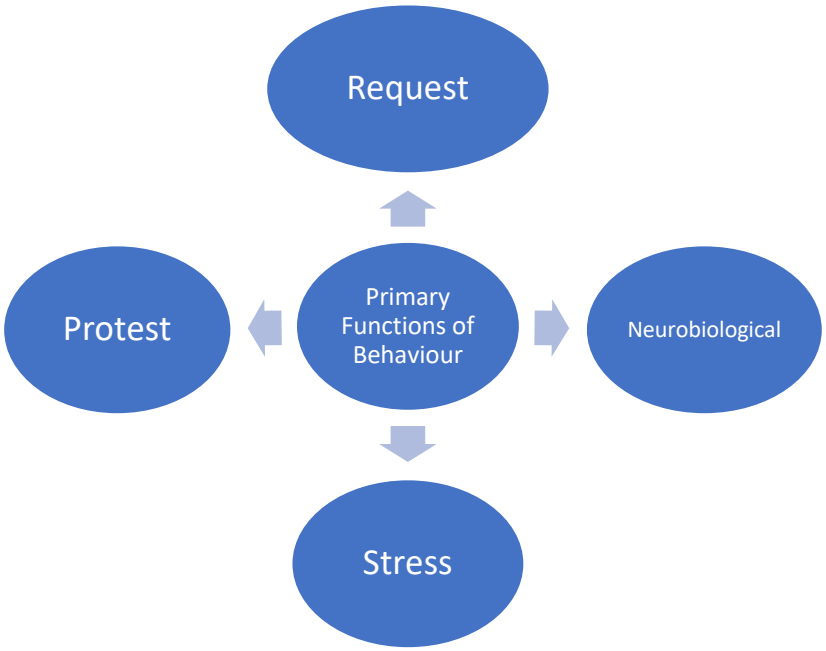
⇒ Avoidance
⇒ Escape
⇒ Transition
⇒ Object/person refusal
⇒ Counter Control

Neurobiological Function

⇒ sensory under stimulation
⇒ sensory over stimulation
⇒ sensory self-stimulation or defensive reaction

Psycho-social Stress Functions

⇒ frustration
⇒ anxiety
⇒ sadness
⇒ pain
⇒ fatigue
⇒ hyperactive arousal



In summary, PSA is based on the idea that all behaviour is a form of communication and the first thing we do is form a hypothesis about the function of that behaviour before we make any other changes!!! Any intervention or changes in environment must be based on a good Functional Assessment and data recording should be ongoing to determine if we are on the right track.

3) INDIVIDUAL FACTOR #3: REINFORCEMENT & HUMAN REWARD

Many people that we support who have grown up with intellectual challenges, sometimes combined with behavioural issues, have had a difficult time connecting with others. Perhaps they had a family who were not able to give them the emotional nurturance they required to form meaningful attachments at an early age. Perhaps the community in general tended to avoid them because they didn't know how to interact or felt fearful and awkward around them. Maybe they were even abused, harassed, or bullied growing up because of their disability and people's intolerance of being different. Consequently, human reward and relationships held little value for them, and they retreated into their own world where they felt safer – preferring to be left alone. PSA argues that in order to break down the walls that have been put up, we need to flood the individual with non-contingent reinforcement and human reward/interaction.

Dr. Carey headed up a program evaluation study early in his career where the management of a large, community group home (i.e. – 10-15 people living there) asked me to determine why their home had such a high incidence of aggressive behaviours and an alarming rate of staff injury and burnout. One of the first tasks in this program evaluation study was to train a team of observers to go into the home at various times of the day and start conducting systematic observations regarding staff/resident interactions. This was like doing a "behavioural assessment" of the environment in order to try and learn what was going on. We didn't provide specific details to the residential staff regarding what we were observing as we didn't want them to change their behaviour and interaction style. We also needed to conduct this over a fairly long length of time so that, eventually, they would forget that we were there as our observers just remained very inconspicuous in the background and didn't interact. One of the main elements that we were recording was the actual frequency, duration and nature of the interactions between the residents and their caregivers.

The findings from this program evaluation study were quite revealing in that they showed that the actual number, duration and quality of staff-resident interactions was very low. In fact, it was something in the order of averaging only 5-6 interactions per person, per shift for very short duration (e.g. – 5 seconds).

Furthermore, we had rated the nature of each interaction based on a 3-point Likert scale (1=positive; 2=neutral; 3=negative) with detailed "operational definitions" of each of these Likert scale criteria. Even more alarming, we found that the vast majority of the interactions between staff and residents were "neutral" in nature (e.g. – simple instruction such as: "go put your coat on"), followed by "negative" interactions (e.g. – verbal reprimand such as "stop doing that now!"). The actual number of "positive" interactions was very low (e.g. – "I love how you just shared your snack with Sally!") and was vastly outnumbered by the negative and neutral interactions.

In addition, we discovered that the actual average amount of any interaction totalled less than 10 minutes per shift with any staff member and the average amount/duration of "positive interactions" was less than a minute per shift across all staff. We also discovered that some staff members were more likely to engage in positive interactions than other staff members and there were some staff who never displayed any positive interactions with their clients. Another fascinating discovery was that the residents who posed the greatest challenges in terms of behaviour tended to get the most interactions! However, this was not a positive finding – because the majority of those interactions were negative! However, as they say – negative interactions are often better than no interaction! The residents who were the best behaved and tended to be quiet and compliant, actually received the fewest interactions of any type.

One of the first recommendations from our study was to:
a) **inform** the staff team of our findings;
b) **educate** them on the importance of human reward and non-contingent reinforcement and explain why this was so important for the people that they were supporting.

We then followed up by asking the staff team to dramatically increase the amount of non-contingent reinforcement that they provided to all the residents of the home. This required a bit of practice with the staff team as it just didn't seem to come naturally to a lot of people. We did role playing and provided feedback to them – often demonstrating some of the very simple ways that they could provide quick and positive rewarding interactions to the people that they supported (e.g. – a smile, a thumbs up when walking by and commenting on something like "I love the shirt you're wearing today"!; "Give me a high five"). The staff team was very

enthusiastic to try and put this into practice and attempt it for a week - as we told them that if they kept this up for a week they could see a big change in the amount of types of behavioural issues that they were having. We also kept the observers in the home for that week, to document that changes in the staff's behaviour.

Lo and behold – within only a few days, we observed some dramatic changes in the residents - a significant decrease in the frequency of aggression, self-injury and self-stimulation! Furthermore, the staff reported feeling much more energized about their job and noted that they were starting to form closer relationships with the people they were supporting. In fact, they mentioned that some of the residents were now coming up to them and seeking attention (in appropriate ways) on their own.

This program evaluation study had an important impact on the development of the PSA approach. We learned about the importance of human connection, reward – well beyond just the impact of "positive reinforcement" which, in behavioural terms, is always applied on a "contingent" basis (i.e. – contingent upon displaying some appropriate behaviour or absence of inappropriate behaviour). This had to do with the ***power of relationship*** and connection. It was reciprocal because it also changed how the staff were feeling about the people that they supported and the important role they provided in initiating this reciprocal human connection. Furthermore, it demonstrated to us the power of making "systemic" changes in environments as these massive behavioural improvements that we observed and measured occurred in a short time frame and without any formal "behaviour support plans" being put in place to "modify" individual resident behaviours!!

One of the obstacles to achieving an environment with a high density of positive reinforcement that is much higher than usual, is preconceived attitudes that many people seem to have about positive interactions.

To address this, in our workshop, one of the exercises that we ask participants to complete is to respond to the following multiple-choice question:

In the setting that I work in I think the amount of reinforcement that occurs on average with any one person is about:

		c	*10-30 times per day*
a	*1-5 times per day*	*d*	*30-50 times per day*
b	*5-10 times per day*	*e*	*over 50 times per day*

The typical response to this question is usually a) or b) – anywhere from 1 to 10 times per day. So, we follow up on this response, with the following question – asking participants what they think a realistic amount of positive reinforcement should be:

I think a good and realistic amount of reinforcing comments, gestures or praise to provide a person in a day would be about:

a) 1-5 times per day
b) 5-10 times per day
c) 10-30 times per day
d) 30-50 times per day
e) over 50 times per day

After this question has been presented, a quick show of hands usually reveals that most individuals respond that 5-10 times/day seems to be an appropriate amount of combined reinforcement that all caregivers should provide to one person in a day. When asked why this number isn't higher, we often hear:

⇒ "Too much positive reinforcement will spoil them, and they'll come to expect it all the time!"
⇒ "I don't get that much positive reinforcement in my daily life, so why would I give it to anybody else?"
⇒ "Giving any more reinforcement than that will seem artificial and forced…. It won't be as meaningful".
⇒ "If you do this for one person, all the others will expect it as well."
⇒ "What this really boils down to is bribery. You can bribe somebody to do almost anything, but they should be doing it because they want to not because you are giving them something for it."

PSA: Principle of Positive Reinforcement

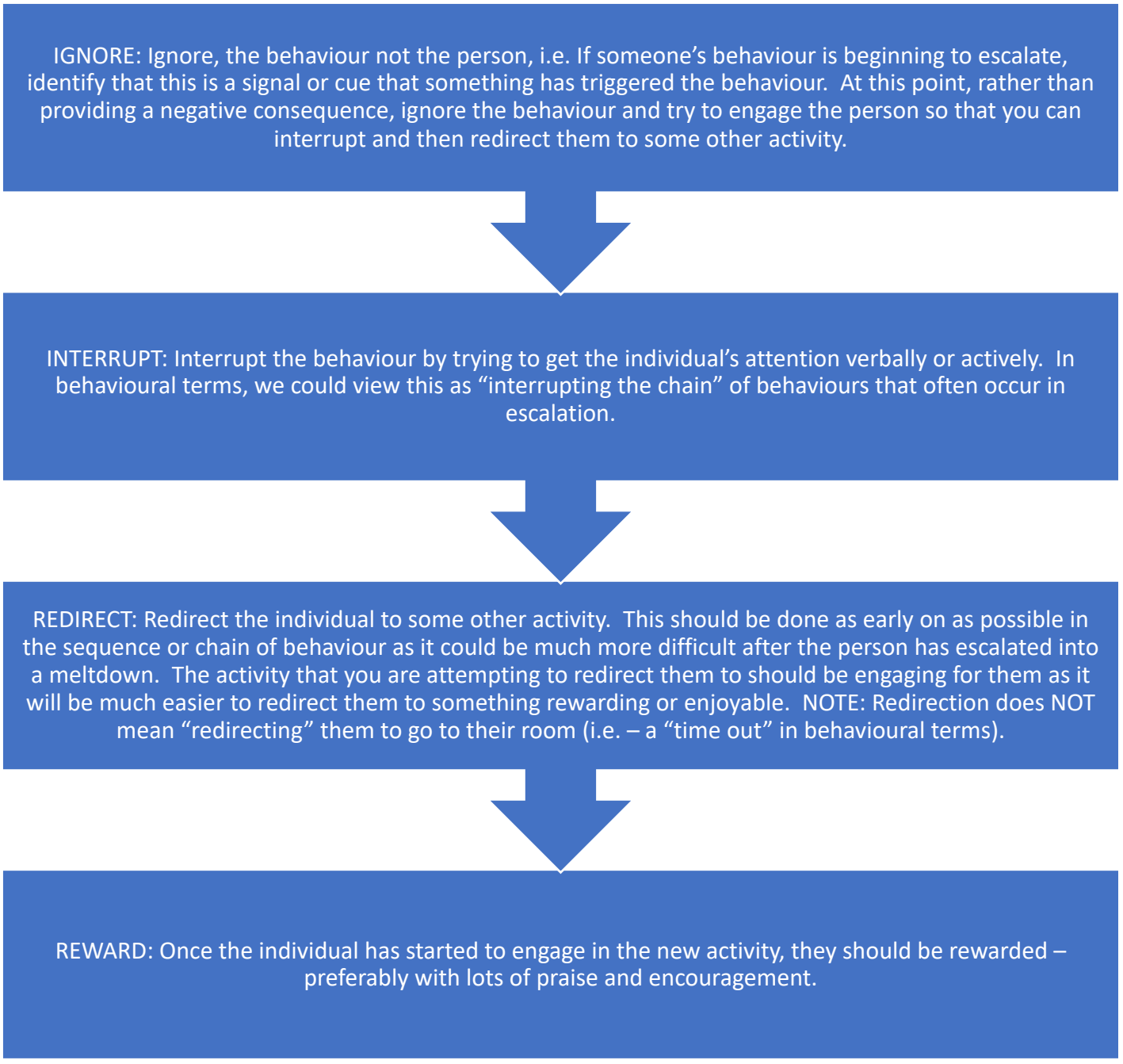
In addressing everyone's concerns about the "dangers" of "too much" positive reinforcement, we note that Positive Systems Approach actually recommends greatly increasing the density of positive reinforcement provided. In fact, when working with a challenging individual, we suggest that the amount of positive feedback and interaction should far exceed what you would normally expect to see (at least 10x the usual amount). There is no such thing as "too much" positive reinforcement, particularly for somebody who has been deprived of this all their lives. A higher than normal density of positive reinforcement is actually necessary in order to start re-building relationship and trust and have that individual come to view other people in a positive light – rather than something to fear or avoid.

We recognize that we live in a world where people tend to be very "stingy" with their positive interactions. In today's Canadian society, maintaining a consistently positive attitude in our daily interactions can often be a challenging endeavor. The complexities of modern life, coupled with the pressures and demands placed upon individuals, contribute to an environment where negativity can easily take root. The fast-paced nature of our interconnected world, while offering numerous conveniences, can also lead to heightened stress levels and reduced patience. Additionally, societal norms and cultural factors might inadvertently discourage open expressions of positivity, causing individuals to tread cautiously in their interactions. The diverse array of backgrounds, beliefs, and perspectives found within Canadian society can sometimes lead to misunderstandings or disagreements, further straining efforts to cultivate positivity. Despite these challenges, fostering a culture of kindness and empathy remains a crucial goal, requiring conscious efforts to break down barriers, promote understanding, and prioritize mental well-being. This explains why greatly increasing the daily amount of positive, human reward has to be a deliberate and conscious effort as it just doesn't come naturally to us and may seem (at first) to be "artificial" or "fake".

Usually, in most behavioural programs, reinforcement is being delivered on a differential basis and is only provided contingent on "good" behaviours. This means that, when working with a challenging individual, they are receiving far too little reinforcement and this impacts on relationship variables with their caregivers. PSA instructs us to try and give as much reinforcement as possible on a non-contingent basis. On a cautionary note, adhering to behavioural principles, it is still important to try and avoid delivering positive reinforcement that follows any inappropriate behaviours as they could be inadvertently strengthened.

4) INDIVIDUAL FACTOR #4: RE-DIRECTION: (THE GENTLE TEACHING PARADIGM)

One of the aspects that we respect about Dr. McGee's Gentle Teaching paradigm, is that, instead of relying on the behavioural prescription of applying an aversive or punishment technique contingent on some inappropriate behaviour, they choose to adopt the approach of: Ignore, Interrupt, Redirect and Reward.



The object here is to set the opportunity for success by changing a potential negative event into a positive interaction opportunity. According to Gentle Teaching principles, the overall strategy is to first teach the value of human presence, leading to participation, and finally reward. Gentle Teaching proponents found that this often works best when there is one central person, who sincerely likes and respects the client, and they are paired to work with them intensely whenever possible over a period necessary to establish the learning of reward. This is much more difficult to do in a conventional group home setting where there may be many different staff and caregivers involved as it is challenging to achieve the level of consistency that is required (see the importance of System Factors – Consistency). We also find that this approach can take weeks, if not months before the individual learns to value human reward and regains trust. Behaviourists will look at this re-direction approach and view this as applying what is termed as: Differential Reward of Alternative behaviours.

These steps (Ignore, Interrupt, Redirect, Reward) are meant to occur as a dynamic process, not as separate components. Ignoring or interrupting a behaviour should occur over a period of seconds and lead quickly into redirection to a positive task or activity, where reward can be, and is, freely given.

The following outlines the overall strategies which can be used to follow this pattern.

Step 1: How to Ignore and Interrupt Destructive or Disruptive Behaviours

Do not ignore the person when they start engaging in destructive or disruptive behaviours but do try and avoid or minimize any negative attention, punishment or restraint that might normally have occurred during or following a maladaptive interaction. The aim of ignoring is to defuse challenging behaviours and take away their power. To ignore this behaviour means that you should avoid making threats, reprimands, scoldings and statements of rules or consequences. There should be no (or at least minimal) positive, neutral or negative verbal or non-verbal attentions to the behaviour. Instead, the person should be immediately re-directed to a task where reward can occur.

This step of ignoring should only occur when serious harm is not likely to occur to people or property. If we are concerned about the potential for serious harm, then obviously we have to intervene to stop it (e.g. – block an attempted hit) and then focus on future prevention (most violence occurs after clear indications and we need to learn the early warning signs as it is easier to redirect at this stage rather than after full escalation). The aim of interruption is to prevent harm while continuing to teach. Interruption should be minimally intrusive and conducted in a calm and warm manner.

Step 2: How to Redirect

Redirection focuses the interaction on acceptable alternatives to inappropriate responses. It also communicates that the inappropriate response is no longer effective, while providing clear information that an alternative response will result in a rewarding interaction. In redirecting it is important to use minimal cues (e.g. non-verbal), thus avoiding the possibility of reinforcing the inappropriate behaviour. Redirection may require several patient attempts and as mentioned earlier, it is easier if you can catch the behaviour in the early stages rather than after full escalation. Once any attempt at participation in the redirected task (or activity or conversation) occurs, the care giver should provide reward (behaviourists would view this as "shaping a desired response").

If the redirection prompt fails to lead to a response, then the caregiver can repeat it, or use a hierarchy of prompts (pointing, touching the learning material, placing it nearer, guiding movements). These prompts must be specific and consistent. The process of redirection should be as brief as possible, to prevent the person gaining reward from inattentiveness.

Step 3: How To Reward

When rewarding the individual for their participation in the new activity, it is important to use sincere, meaningful verbal and non-verbal means of communicating your pleasure. Tangible rewards (i.e. – food items) do not usually help teach the value of social reward. You may choose to reward at any point (or all points) of a task: the initiation, participation, or completion. When using contingent positive reinforcement, remember:

- ⇒ ***Set the occasion for success.*** Try and find those times in the persons day where they can succeed and be rewarded, use the most benign examples, sitting quietly, working hard, eating well etc..
- ⇒ ***Use the "Premack Principle"*** – that is, pair a less desirable event with a more highly desirable activity – e.g. - "when we are finished with your bath, I will play a game with you"….. .or "After work we can go for a drive".
- ⇒ ***Assist with tasks.*** It seems that we tend to encourage independence with the vulnerable people that we support, however, McGee would suggest we encourage "interdependence" as he felt that it is far more rewarding to do things together than alone. For example: The person we support might have many competencies but does this mean they must always do these tasks alone. We can make the day go faster and make the task more fun by assisting or joining in.

5) INDIVIDUAL FACTOR #5: COPING - HOW CAN WE HELP?

When working with people who present with challenging behaviours, part of any intervention should be teaching a new skill so that they can learn the necessary tools for success.

An example of some of the types of coping skills that may be taught include:

⇒ anger management,
⇒ teaching metacognitive skills (Mitsea et al, 2022)
⇒ problem solving,
⇒ social skills,
⇒ communication,
⇒ relaxation (e.g. using massage, snoezelin rooms, music therapy, art therapy, play therapy)

There are entire books that have been written on each of these coping skill areas and this is not the place to provide details on how to teach these skills – however, some general guidelines that are consistent with the Positive Systems Approach includes:

Important Variables in Teaching New Skills

- **Manage Precursor behaviours_-** e.g. ensure that nothing throwable is in reach if the person uses throwing as an inappropriate form of communicating.
- **Environmental management** - e.g - sitting with an aggressive individual on the other side of a table (out of reach) if you are likely to be hit.
- **Stimulus control** - set up the tasks before the person so as to ensure on-task success through the consideration of factors such as the arrangement of the tasks, control of materials, concreteness of the task, teaching methods, location, etc.
- **Errorless learning** - break learning skills into a sequence which facilitates their acquisition, and provide adequate assistance in order to avoid errors (so that structured tasks can serve as vehicles to teach reward throughout the day).
- **Teach quietly** - initially, using minimal verbal instruction maximizes the power of verbal reward, and prevents on-task confusion. Gradually use more language as the reward - learning cycle takes hold.

- **Shaping and Fading** - use the caregiver's initial intense presence, necessary assistance and reward teaching as a way to ensure as much as possible the person's on-task attention (shaping), and then, as rapidly as possible, remove the external assistance and reward so that the person will remain on-task and be able to receive sufficient reward from the task itself (fading).
- **Assistance** - initiate learning with a sufficiently high degree of assistance to ensure success and systematically and rapidly decreasing the degree of assistance, but ready at any given point in time to offer higher degrees of assistance for purposes of redirection or reward- teaching.
- **Using the task as a vehicle, not an end in itself** - each part of the day needs structuring so that there are opportunities to create rewarding interactions - we cannot wait for these opportunities to present themselves. It is important to remember that the task of learning is secondary to the teaching of rewarding interactions.

6) INDIVIDUAL FACTOR #6: RELATIONSHIP/RAPPORT

Remember that without a meaningful relationship and rapport – we have nothing but cold and mechanistic "techniques". Research has demonstrated that the most important variable in determining therapeutic outcome is an empathic relationship with the therapist (Moudatsou, 2020). This is essential in motivating a person to engage in a behavioural change process. In addition, it is vital that we consider using a trauma informed approach in developing this relationship, given the fact that many of the vulnerable people we support are presenting behavioural challenges stemming from trauma in their lives (Rajaraman et al, 2022).

Reciprocal interactions play a crucial role in establishing therapeutic rapport with clients in various therapeutic settings. The importance of reciprocal interactions in building a strong therapeutic rapport can be summarized in several key points:

1. **Trust and Safety**: Reciprocal interactions help create a safe and trusting therapeutic environment. When individuals perceive that their caregiver is genuinely engaged, responsive, and interested in their well-being, they are more likely to feel safe and open up about their thoughts, emotions, and concerns.

2. **Effective Communication**: Effective communication is essential for therapeutic progress. Reciprocal interactions facilitate clear and empathetic communication between the caregiver and the individual receiving supports. When individuals feel heard and understood, they are more likely to express themselves honestly and openly.

3. **Validation and Empathy**: Reciprocal interactions involve active listening and empathetic responses. Individuals often seek validation and understanding for their experiences and emotions. When therapists engage in reciprocal interactions, they convey empathy and validate the individuals' feelings, which can be profoundly therapeutic.

4. **Building Rapport**: Therapeutic rapport is built on a foundation of mutual respect and connection. Reciprocal interactions foster a sense of connection between the caregiver and the individual. This connection can promote a positive therapeutic alliance, which is associated with better treatment outcomes.

5. **Collaborative Goal Setting**: Effective therapy often involves setting goals and working collaboratively to achieve them. Reciprocal interactions enable clients and therapists to work together in defining treatment goals and strategies, increasing the person's sense of agency and ownership in the therapeutic process.

6. **Emotional Support**: Vulnerable people that we support often grapple with emotional distress. Reciprocal interactions provide emotional support, which can

help them cope with difficult emotions and experiences. Feeling supported by the caregiver can be comforting and healing.

7. **Enhancing Self-Esteem**: Reciprocal interactions that acknowledge individuals' strengths and resilience can enhance their self-esteem. This, in turn, can contribute to personal growth and empowerment.
8. **Reduction of Resistance**: Often the people that we support may initially be resistant to change. Reciprocal interactions can reduce resistance by fostering a non-confrontational, collaborative atmosphere. When individuals feel respected and valued, they are more likely to engage in the therapeutic process.
9. **Cultural Competence**: In culturally diverse contexts, reciprocal interactions can help caregivers understand and respect the unique cultural perspectives and values of the people they support.
10. **Individual Engagement**: Reciprocal interactions contribute to individual engagement because, when they feel that their caregiver genuinely cares about their well-being, they are more likely to remain committed to working with them.

In summary, reciprocal interactions are fundamental to creating a safe, supportive, and collaborative therapeutic environment. These interactions promote trust, effective communication, empathy, and mutual respect, all of which are critical for positive behavioural change.

Earlier, I mentioned the importance of using a trauma informed approach in supporting vulnerable people who present with behavioural challenges. Using a trauma-informed approach when supporting an adult with a developmental disability and challenging behavioural outbursts involves recognizing and addressing the potential trauma they may have experienced in their past, as well as creating an environment that fosters safety, trust, and healing. Following is an example of how a trauma informed approach can be applied within a Positive Systems framework:

Case Scenario

Background: Sarah is a 35-year-old woman with a developmental disability. She has a history of exhibiting challenging behavioural outbursts, such as aggression and self-harm. She has spent most of her life in institutional settings and has a limited ability to communicate verbally. Her caregivers suspect that she may have experienced trauma during her time in these institutions.

Trauma-Informed Approach:

1. **Building Trust and Safety:**
    - Establish trust by maintaining a consistent and compassionate approach in all interactions with Sarah.
    - Create a safe physical environment, ensuring that there are no triggers or objects that may remind her of past traumatic experiences.
2. **Understanding Triggers:**
    - Work closely with Sarah's caregivers to gather information about her past experiences and any known triggers that may lead to behavioural outbursts.
    - Use non-verbal communication and observation skills to identify signs of distress or agitation in Sarah.
3. **Person-Centered Care:**
    - Develop an individualized care plan that takes into account Sarah's unique needs, preferences, and communication style.
    - Include Sarah in the decision-making process to the extent possible, respecting her autonomy.
4. **Communication and Emotional Regulation:**
    - Use alternative communication methods, such as picture boards, sign language, or assistive technology, to help Sarah express her emotions and needs.
    - Teach Sarah coping skills and alternative ways to express her feelings, such as deep breathing exercises or using a sensory toolkit.
5. **Trauma-Informed Training:**
    - Provide training to Sarah's caregivers and support staff on trauma-informed care principles to ensure everyone understands the importance of this approach and can implement it effectively.

6. **Avoiding Restraints and Punishments:**
    - Avoid physical restraints or punitive measures when Sarah exhibits challenging behaviours. These can retraumatize individuals with a history of trauma.
    - Instead, focus on de-escalation techniques, such as giving her space, using calming sensory interventions, and redirecting her attention (see Ignore/Interrupt/Redirect/Reward paradigm outlined earlier).
7. **Monitoring Progress:**
    - Regularly review and adjust the care plan based on Sarah's progress and changing needs.
    - Continuously assess the impact of the trauma-informed approach on her behavioural outbursts and overall well-being.
8. **Collaboration and Support:**
    - Work collaboratively with mental health professionals or trauma specialists who can provide additional expertise and interventions specific to trauma recovery.
9. **Documentation and Evaluation:**
    - Keep detailed records of Sarah's behaviours, interventions, and progress to inform future care decisions.
    - Periodically evaluate the effectiveness of the trauma-informed approach and make necessary adjustments.

By applying a trauma-informed approach, the focus shifts from simply managing challenging behaviours to understanding and addressing the underlying trauma that may be driving those behaviours. This approach creates a more supportive and healing environment for individuals like Sarah, ultimately improving their quality of life and well-being.

7) INDIVIDUAL FACTOR #7: STIMULATION

Previous research examining the effects of intensive stimulation and activity on the self-stimulatory behaviour of autistic individuals (e.g. – Ferreira et al, 2019) showed us that exposure to active and stimulating activities and very dense schedules of non-contingent reinforcement could have a drastic impact on reducing negative behaviours.

Many negative behaviours are an attempt to gain attention, or escape/avoid undesirable situations, or to provide some form of stimulation. In reality, however, it is much more difficult to implement this condition. In systemic terms, it requires:

- ⇒ good staffing ratio,
- ⇒ committed and enthusiastic staff,
- ⇒ flexibility in terms of schedule and activity,
- ⇒ accessible and affordable stimulating events and activities.

One of the major problems that I had in implementing this sort of strategy of increasing stimulation levels was that it usually required staffing levels that were not available in community settings. But the principle is sound and if we can assume that many negative behaviours are an attempt to gain attention, or escape/avoid undesirable situations, or to provide some form of stimulation - then providing intensive stimulation, even for short periods, which the person finds enjoyable should reduce the incidence of negative behaviours. In reality, however, in order to implement this, we usually need to first address systemic barriers (see System factors). This component (Stimulation) requires: good staffing ratio, committed and enthusiastic staff, flexibility in terms of schedule and activity, accessible and affordable stimulating events and activities.

If we have a supportive system, then we have learned that intensive stimulation, when provided in an appropriate and individualized manner, can have several positive impacts on reducing behavioural challenges in persons with developmental disabilities and/or autism. It's important to note that the effectiveness of intensive stimulation can vary from person to person, and the approach should be tailored to the individual's specific needs and preferences.

Here are some potential positive impacts:

1. **Improved Sensory Regulation:**

Many individuals with developmental disabilities or autism have sensory processing differences. Intensive stimulation can help them regulate sensory input and reduce sensory overload. For example, deep pressure, sensory breaks, or sensory rooms can provide sensory input that helps individuals feel calmer and more focused.

2. **Enhanced Communication:**

Intensive stimulation can be used as a means of communication for non-verbal or minimally verbal individuals. Sensory tools and activities can help individuals express their needs and preferences, reducing frustration and challenging behaviours related to communication difficulties.

3. **Calming and Self-Soothing:**

Intensive stimulation techniques like deep pressure or sensory activities (e.g., swinging, rocking) can have a calming effect. They may help individuals self-soothe and reduce anxiety, which can, in turn, decrease behaviours associated with agitation or distress.

4. **Structured Routine and Predictability:**

Implementing intensive stimulation as part of a structured routine can provide predictability and a sense of security for individuals with developmental disabilities or autism. Knowing when and how they will receive sensory input can reduce anxiety and meltdowns.

5. **Stress Reduction:**

Intensive stimulation can serve as a stress-relief strategy. Engaging in physical exercise or sensory activities can help individuals cope with stressors and reduce the likelihood of exhibiting challenging behaviours as a response to stress.

6. **Increased Focus and Attention:**

Some individuals with developmental disabilities or autism benefit from sensory input to help them focus and engage in tasks. Intensive stimulation techniques may enhance their attention span, making it easier to participate in learning and other activities.

7. **Positive Reinforcement:**

Providing sensory activities or stimuli as a reward for desired behaviours can serve as positive reinforcement. This can motivate individuals to engage in appropriate behaviours and reduce the occurrence of challenging behaviours.

8. **Individualized Support:**

Intensive stimulation should be tailored to the specific sensory preferences and sensitivities of each individual. By individualizing the approach, it becomes more effective in addressing their unique needs and reducing challenging behaviours.

9. **Caregiver and Family Support:**

Intensive stimulation techniques can also be taught to caregivers and family members, allowing them to provide consistent and supportive sensory input, even outside of structured therapy sessions or educational settings.

It's important to emphasize that while intensive stimulation can have positive impacts, it should always be administered under the guidance of professionals, such as psychologists, occupational therapists, or behaviour analysts, who have expertise in working with individuals with developmental disabilities or autism.

Study Questions

1) Why does PSA insist that we need to take a close look at the complete history (i.e. – not just the behavioural history) for the person, before developing a support plan? How does this differ from traditional ABA approaches?

2) When dealing with an individual who has a mental health disorder along with severe behavioural challenges, what should the primary consideration be in developing a support plan?

3) What can go wrong if we don't have a good operational definition of a behaviour prior to starting a functional analysis?

4) How can we best determine if we have a "reliable" operational definition?

5) What is "baseline data" and why is it important?

6) What are some of the possible things we should consider if our support plan is not achieving the desired results?

7) What are some reasons why it is important to collect ongoing behavioural data as part of the support plan and to do so in different settings?

8) What is a reason why, when conducting a Functional Analysis of behaviour, why you might use an "indirect assessment" as opposed to a "direct assessment" of that behaviour?

9) Why do we consider looking at behaviour as a form of communication as an absolutely essential component of PSA?

10) What are some reasons why a vulnerable individual may find little value in human reward and relationships?

11) In contrast to many ABA programs, PSA recommends the liberal use of non-contingent rewards (as opposed to programs that only dictate "contingent" reinforcement). Should we be concerned that we could be inadvertently reinforcing inappropriate behaviours with non-contingent reinforcement and what could we do to mitigate this possibility?

12) Why does PSA recommend a higher-than-normal density of positive reinforcement when working with challenging behaviours?

13) When considering the Gentle Teaching paradigm of "ignore, interrupt, re-direct and reward", how do we handle a serious situation (e.g. – physical aggression) that we simply cannot ignore because of safety considerations?

14) What are at least 4 important variables to consider when teaching new coping skills?

15) What are several ways that we can develop reciprocal interactions in building a strong therapeutic rapport with the people we support?

16) In real life situations, why is it so difficult to increase the levels of stimulation provided?

17) List at least 4 benefits to providing intensive stimulation to an individual with behavioural challenges.

Chapter 6: PSA – System Factors

Considering system factors is crucial when supporting vulnerable individuals with developmental disabilities and behavioural challenges. These factors encompass the larger context within which individuals receive care and services, including policies, regulations, organizational constraints, funding, and community resources. Recognizing and addressing these system factors is essential for providing effective and holistic support. System factors influence an individual's ability to access necessary services and support. Barriers such as limited availability, long waiting lists, or complex eligibility criteria can prevent vulnerable individuals from receiving timely assistance. Adequate funding and resources are essential for providing quality care and interventions. An effective support system requires coordination among various service providers and agencies. Fragmented or uncoordinated care can lead to gaps in service delivery and challenges in addressing the complex needs of individuals with developmental disabilities. System factors determine the availability of training and education for caregivers, professionals, and service providers. Well-trained staff are essential to putting into operation a Positive Systems Approach. Once this has been implemented, we also need to ensure that we have in place quality assurance mechanisms and monitoring systems. These systems help identify and address issues related to the quality of care, safety, and the prevention of abuse or neglect. System factors are also important in determining the availability and effectiveness of crisis intervention services. Positive Systems Approach dictates that, at a minimum, the following system factors need to be in place for effective supports:

1) SYSTEM FACTOR #1: FLEXIBILITY

The system needs to be able to be flexible around the individual. What does this mean? What kinds of flexibility are we talking about? The system must offer the person as much flexibility as possible in terms of such things as:

⇒ staffing credentials,
⇒ staffing scheduling,
⇒ living arrangements,
⇒ day program requirements.

Let's discuss each of these individual factors:

Staffing: What should we look for in hiring staff to work with challenging individuals? I understand that there are certain minimum academic credentials that we need to have in place for hiring staff – however, I would argue that, in working with challenging behaviours, it is not academic credentials that should be the primary criterion for hiring. Rather, ***personal suitability*** is what is most important.

The types of qualities that we should seek in these staff or caregivers are:

- Is the person intimidated by challenging behaviours?
- Are they able to take a positive, enthusiastic and optimistic attitude even in the face of negative behaviour?
- Are they mature, self-confident people that have strong self-esteem?
- Do they value people with disabilities as being equal to themselves and recognize that they may also benefit from such a relationship?
- Are they open to learning and acquiring new skills without becoming defensive or trying to hold onto old ways of doing things?

Terry has developed a checklist of characteristics that make staff good "team members". It can be downloaded from the website (www.drbobcarey.com) as "360eval.pdf" and can be used to survey team members for the purpose of developing performance improvement plans or giving regular evaluations of members of a staff team.

Schedules: What kind of flexibility do we require around staffing schedules? Staffing needs to be directed to the time of day when it is required the most -this means that it could be at 2 or 3 a.m. or on the weekends. This goes against the usual way of scheduling staff which is heavily directed towards daytime hours - Monday to Friday. The decision around scheduling of our staffing resources should be data driven – that is, our "baseline" data will tell us when and where we need to focus our staffing resources. In unionized environments particularly, this can be a substantial challenge to adapt properly. Terry has found that staff and their union representatives often are very cooperative with ensuring staffing supports the needs of challenging persons, as this also goes a long way to ensuring staff safety and leads to far more effective and successful care, and ultimately, better working conditions.

Living arrangements: What kind of flexibility do we need around living arrangements? This may mean making changes in terms of where the person lives and with whom. We have seen countless occasions where doing nothing else but making this change has resulted in significant improvements. For instance, one young man that I was consulting on was living in a large, core residence in the community with 15 other individuals - many of whom were frequently out of control, noisy and disruptive. This young man had Autism Spectrum Disorder and found the environment quite intolerable. He would often hit out and be aggressive towards his peers. He didn't act this way in other environments where these factors didn't come into play. A simple suggestion was to move him into his own apartment with suitable staffing and this solved the problem without any sophisticated types of behavioural intervention required. Yes, sometimes, just making changes to the support system can have dramatic impacts on behavioural presentation!!

Day Program: Most of the individuals that we support are participating in some type of employment, supported employment, sheltered workshop or activity program. Once again, if the data (see Identification section) points to the fact that behavioural issues crop up primarily in the day program environment, then we need to find out what aspects of that environment are triggering the behaviour. It could be a combination of a variety of issues – such as: staffing ratio is inadequate, staff training for dealing with behavioural issues is inadequate, physical layout of the environment is inadequate (e.g. – noisy, visual distractions), work/activity is not suitable for the individual (e.g. – boring, too difficult, too repetitive, painful). A flexible support

system is one in which we have options to re-consider what type of “day program” would best suit the individual. In doing this, we may have to examine our goal of finding meaningful employment and look more towards finding meaningful activities that the person finds interesting and more suited to their interests and abilities. Sometimes, this may mean that the individual will be best supported during the day, at home – engaged in self-paced, flexible activities that they enjoy. This isn't to say that staff can't find vocational kinds of activities that are suitable - but this may take some creativity and willingness on the part of staff to find this kind of activity and make it work.

2) SYSTEM FACTOR #2: PERSEVERENCE/TOLERANCE

We can recall meeting with managers of community organizations that support people with intellectual challenges, autism spectrum disorders and mental health issues. They were often willing to accept new funding to support some very complex individuals who were being discharged from institutional settings. Sometimes, their attitude was that the nature of the institionalized care that the individual had been receiving was the origin of behavioural issues and, once the person came to live in a more normalized, community setting, these issues would disappear. Furthermore, they often sought a commitment from the discharging institution to agree to take the individual back into their care if things didn't work out. What they often failed to realize was:

- It usually takes a long time to build the kind of relationship and structure a suitable environment with all the PSA components that have been mentioned.

- The support environment must demonstrate a strong commitment towards maintaining the individual in their community. This means that we should not seek hospital placement or institutionalization at the first signs of trouble.

- The agency should realize that behavioural challenges may be a part of the individual's disorder and could be present for a long time.

- Rarely does hospital placement result in meaningful and enduring behavioural change. The best way to achieve this is to address system and resource issues that prevent the person from getting the assistance that they require in the community environment that they are going to be living in.

- It is important to develop action plans that provide good crisis management, assistance from other supports family, hospital, police etc.

- It is important to provide support to the system for relief staffing, back up staffing during times when a higher ratio is required and ensure that regular and ongoing training/professional development is part of the plan.

- The supporting agency needs to provide sufficient supports to enable staff to feel positive within their roles in order to avoid burnout. Finding staff or caregivers who can demonstrate objectivity, rational detachment, and the ability to not take things personally is paramount especially when working with someone who may be aggressive.

- The most important attributes for a team, working with challenging individuals, is self-confidence, emotional maturity and the ability to work as a team.

- Many individuals with developmental disabilities and severe behavioural disorders have experienced a history of challenges, rejection, or trauma. Demonstrating perseverance and tolerance can help build trust over time. By consistently showing that you are willing to work with them despite their difficulties, you can create a safe and supportive environment where they feel more comfortable and open to engagement.

- Severe behavioural disorders can be challenging to address, and progress may be slow. Perseverance is essential to continue trying different strategies, therapies, and interventions to find what works best for each individual. Tolerance is crucial because it may take time for behavioural changes to occur, and there may be setbacks along the way. Caregivers must remain patient and maintain a long-term perspective to support sustainable progress.

- Caregivers often serve as role models for individuals with developmental disabilities. By demonstrating perseverance and tolerance, caregivers can set an example for how to cope with frustration, stress, and difficult situations in a constructive manner. This

modeling can help the individuals learn and develop their own coping skills and adaptive behaviours.

- Every individual with a developmental disability and behavioural disorder is unique, and what works for one person may not work for another. Perseverance is essential in finding the right strategies and approaches that align with each individual's needs and preferences. Tolerance ensures that caregivers remain open-minded and flexible in adapting their support as necessary.

- Many individuals with severe behavioural disorders may exhibit aggressive or agitated behaviour as a way of communicating their distress or frustration. Perseverance and tolerance can help caregivers remain calm and composed when confronted with challenging behaviours, which can de-escalate situations and reduce the risk of harm to both the individuals and the caregivers.

- The ultimate goal of caregiving for individuals with developmental disabilities and severe behavioural disorders is to improve their quality of life. Perseverance and tolerance are fundamental in helping individuals achieve a higher level of independence, social inclusion, and overall well-being. Overcoming behavioural challenges can lead to a more fulfilling and satisfying life for these individuals.

In summary, perseverance and tolerance are essential qualities for staff and the system they are working within as these qualities help build trust, promote positive change, model appropriate behaviour, tailor support, reduce aggression, and enhance the overall quality of life for the individuals they care for.

3) SYSTEM FACTOR #3: CONSISTENCY

Positive Systems requires commitment and consistency – not only on an individual basis but also from the system that is supporting the individual. This can be very difficult to achieve in a system where the individual is being supported by many different staff and caregivers (e.g. - part-time, relief, weekend staff), plus has contact with family members on a regular basis. In my experience, when working with really challenging individuals, the best way to achieve the high level of consistency required for behaviour change, is to develop a "core team" of staff/caregivers. A good core team typically includes:

1) **Composition:** A core team should have a minimum of 4 staff/caregivers that:

- ⇒ have a rapport with the individual;
- ⇒ have an interest in working through challenging behaviours;
- ⇒ are willing to work the required shifts to ensure adequate coverage over the times when required by the individual (e.g. – trying to ensure that one member of core team is available during the times when needed, including weekends, evenings or nights – if necessary). I recognize that funding and resource constraints often prevent the development of a "core team" whereby these members are the only ones that have contact with the individual during the day/night. Therefore, it is recommended that the shifts be arranged such that at least one of the core member team is on shift at all times to monitor, guide other staff and step in when required.

2) **Communication:** Core team members should meet on a regular basis with Behavioural Consultants/Psychologist to review protocols, engage in training related to PSA and role playing the best individual interaction styles with the individual.

3) **Case Management:** Core team members take responsibility for case management – including scheduling of appointments, data collection/analysis.

4) **Written Protocols**: The Core team is responsible for implementing written protocols (see Appendix for an example of this). These written protocols are essential to ensure consistency of approach. They are often developed in collaboration with the consulting professional team (e.g. – behaviour analyst, psychologist). Written protocols ensure that all staff and caregivers consistently

follow the same procedures when dealing with challenging behaviours. This consistency is essential for the effectiveness of interventions and for maintaining a safe and supportive environment. Working with challenging behaviours can pose risks to both the individuals and those providing care. Written protocols are necessary for the following reasons:

⇒ Protocols outline safety measures and strategies to minimize harm, ensuring the well-being of everyone involved.

⇒ These protocols often include legal and ethical guidelines that must be followed when managing challenging behaviours. Adhering to these guidelines helps organizations and caregivers avoid legal issues and maintain ethical standards of care.

⇒ They also serve as valuable training tools for new staff members or caregivers.

⇒ They provide a clear and standardized framework for understanding and addressing challenging behaviours, helping to onboard and train personnel effectively.

⇒ They should provide a structured approach to decision-making which facilitates quick action in high-stress situations.

⇒ Caregivers can refer to the protocols to determine appropriate interventions, reducing the likelihood of impulsive or inappropriate responses to challenging behaviours.

⇒ They are also instrumental in facilitating communication among staff members and between different service providers. They help ensure that everyone involved in an individual's care is on the same page and working toward common goals.

⇒ Protocols often include procedures for documenting incidents and behavioural data. This documentation is essential for tracking progress, identifying patterns, and adjusting interventions as needed to achieve the best outcomes.

⇒ They should establish clear expectations and accountability for staff and caregivers.

⇒ When followed consistently, they help assess the effectiveness of interventions and determine if modifications are necessary.

⇒ Finally, written protocols should not be viewed as a “final product”. They can be updated and refined based on the latest research and best practices. This allows organizations to adapt to new knowledge and improve their approaches to managing challenging behaviours over time.

4) SYSTEM FACTOR #4: PORTABILITY

In order to help us achieve consistency in approach, PSA should be implemented across settings and time. It is very important for the individual to be exposed to the same approach used in their home environment, school or workplace. When this system factor is discussed, people often complain that there is inadequate staffing available in one or more of the settings that the person is involved with (e.g. – following the written protocol in the day program environment). This is where the development of the "core team" is so important as we need to ensure that there is representation on that core team from the various environments that the individual regularly participates in.

> PSA protocols that can be applied consistently across various environments help ensure that individuals receive consistent support and guidance regardless of where they are.

This consistency is essential for individuals with developmental disabilities or behavioural challenges because it helps them understand and adapt to expectations and routines more easily. We also need to consider the issues of generalization of skills as individuals who receive behavioural interventions in one environment may need to apply those skills in other settings, such as home, school, work, or community settings.

> A portable approach ensures that the skills and strategies learned in one environment can be generalized to others, enhancing the individual's ability to function effectively in different contexts.

There is also the practicality and efficiency aspects to consider in that a portable approach minimizes the need to develop and implement separate intervention plans for each environment. This saves time, resources, and effort for both caregivers and professionals, making it more practical and efficient to support individuals with behavioural challenges in diverse settings.

PSA needs to be portable for the following reasons:

⇒ Transitioning between different environments can be stressful for vulnerable individuals and a portable approach reduces confusion and anxiety by providing a consistent framework and set of strategies that individuals can rely on regardless of where they are.

⇒ Furthermore, when multiple caregivers, educators, or professionals are involved in an individual's care, a portable approach facilitates collaboration and communication. It allows for a shared understanding of intervention strategies and goals, promoting a unified approach to support.

⇒ Ultimately, the goal of a PSA approach is to equip individuals with the skills they need to succeed in real-life situations. A portable approach ensures that interventions are designed with real-world applicability in mind, increasing the likelihood of success in various environments.

⇒ A portable approach emphasizes flexibility and adaptability, allowing interventions to be adjusted as needed to address changing circumstances and evolving needs.

⇒ In addition, portable interventions are more likely to be sustained over the long term because they are practical and adaptable. This ensures that individuals continue to receive support even as they transition between different phases of their lives or move to new locations.

5) SYSTEM FACTOR #5: INTENSITY

In the earlier section on PSA: Principles of Positive Reinforcement I stressed that *"…..when working with a challenging individual, I suggest that the amount of positive feedback and interaction should far exceed what you would normally expect to see (at least 10x the usual amount). There is no such thing as "too much" positive reinforcement, particularly for somebody who has been deprived of this all their lives. A higher than normal density of positive reinforcement is actually necessary in order to start re-building relationship and trust and have that individual come to view other people in a positive light – rather than something to fear or avoid."*

In order to provide a much higher than normal density of reinforcement and human reward, it is clear that we need a support system that can facilitate this. As the number and quality of interactions per day is dramatically increased, the system of feedback requires intense observation and ability to respond quickly. Higher than normal staffing ratios are usually required at least during the initial stages to ensure that frequent interactions and reward is available. This may also be important at crisis points as this also often requires additional staffing to employ the re-direction strategies mentioned earlier.

The difficulty arises when the support system can only provide increased staffing on a limited basis, during periods of crisis. Unfortunately, this scenario can exacerbate the behavioural challenges if it turns out that the individual is only getting increased attention during times of behavioural episodes. That sets up the possibility that the behaviour could be inadvertently reinforced (i.e. – the behaviour results in increased attention).

6) SYSTEM FACTOR #6: CHANGE

This relates both to the importance of a flexible support system that is willing to change how it delivers service. It also touches on behavioural concepts of what is referred to as stimulus change and stimulus control strategies for reducing behavioural challenges.

In Applied Behaviour Analysis, **Stimulus Change** is defined as:
any alteration in the environment that can influence an individual's behaviour. These changes may involve the introduction, removal, or modification of stimuli in the individual's surroundings.

This can include:

- ⇒ changes in sensory stimuli (e.g., lighting, noise),
- ⇒ changes in the arrangement of objects or people,
- ⇒ changes in the way instructions or prompts are presented.

One of the major ways that PSA uses to address aggressive and disruptive behaviours is to simply modify the environment to reduce or eliminate triggers. For example, if a particular noise or lighting condition tends to provoke aggression, adjusting the environment by using noise-cancelling headphones or dimming lights may help. Alternatively, introducing alternative, more appropriate activities can divert attention away from aggression. For instance, if an individual becomes aggressive during transitions, providing them with a visual schedule or using a timer to signal transitions can help make the change less abrupt and stressful. We know that many individuals with communication disorders may resort to aggression when they are unable to communicate their needs or frustrations effectively. Implementing augmentative and alternative communication (AAC) systems, such as picture communication boards or speech-generating devices, can help them express themselves and reduce frustration.

Stimulus Control techniques often involves manipulating the antecedent or the events that precede the challenging behaviour.

For example, if a person becomes aggressive when asked to complete a difficult task, modifying the task's difficulty or providing additional supports at that time can reduce the likelihood of aggression. Establishing discriminative stimuli can help individuals understand when it is appropriate to engage in certain behaviours. For instance, teaching a person that screaming is not allowed in certain settings but is acceptable in others (e.g., in a safe and supervised "venting" space) can be an effective form of stimulus control. Prompting and reinforcing appropriate behaviours can help individuals learn more adaptive responses to challenging situations. Positive Systems Approach plans often include strategies such as differential reinforcement of alternative behaviours (DRA) and functional communication training (FCT) to encourage desirable behaviours. As mentioned earlier (Identification section), conducting a thorough Functional Analysis is crucial to understanding the function of the aggressive or disruptive behaviour. Is it a means of escape, attention-seeking, access to a preferred item, or sensory stimulation? Identifying the function helps tailor stimulus change and control strategies effectively.

The bottom line is that Stimulus Change & Stimulus Control techniques are very effective ways of changing the stimulus conditions that are precipitating the behaviours and changing them by altering those stimuli – for instance, moving locations or re-direction to other activities. They are also effective ways of controlling where/when/how that behaviour is to be engaged in (e.g. – somebody who engages in obsessive-compulsive ripping behaviours only being allowed to engage in that behaviour in a certain specific location of the house at a specific time of day).

Under this heading, we also stressed the importance of the individual's support system to be flexible and open to making changes. There are several reasons why this is so important:

Individualized Needs: Every individual with behavioural challenges is unique. What works for one person may not work for another. Flexibility allows the support system to tailor strategies to meet the specific needs and preferences of each individual. This individualization is essential because behavioural challenges can have various underlying causes, and effective approaches may vary significantly from one person to another.

Dynamic Nature of Behaviour: Behaviours can change over time. An approach that was effective at one point may become less effective as the individual's needs or circumstances change. A flexible support system can adapt to these changes by continually assessing and modifying strategies to address the evolving behavioural challenges.

Response to Interventions: Working within a Positive Systems approach often requires ongoing evaluation and adjustment. Not all support plans will yield immediate results, and some may need to be refined or replaced as more data and information become available. A flexible support system acknowledges that it may take time to find the most effective support plan and is willing to make adjustments along the way.

Avoiding Rigid Approaches: Rigid and unchanging support systems can lead to frustration, resistance, and non-compliance in individuals with behavioural challenges. Such rigidity may exacerbate the challenging behaviours rather than reduce them. Flexibility helps prevent individuals from feeling trapped or controlled, which can be counterproductive to the goal of promoting positive behaviour change.

Changing Circumstances: An individual's environment and life circumstances can change, which may impact their behaviour. For example, a change in living arrangements, school, or work may necessitate adjustments in the support plan. A flexible support system is prepared to adapt to these changes and continue providing effective assistance.

Continuous Learning: A flexible support system stays current with the latest knowledge and incorporates evidence-based practices into their approach. This commitment to learning can lead to more effective and efficient strategies.

Collaboration and Feedback: Flexibility in making systemic changes allows for collaboration among the support team, including caregivers, therapists, educators, and other professionals. Open communication and feedback from all team members can lead to better problem-solving and the identification of new strategies or adjustments to existing ones.

Respect and Dignity: Flexibility and ability to make changes when required in supporting individuals with behavioural challenges is a reflection of respect for their autonomy and dignity. It acknowledges that individuals have the capacity for growth and change, and it respects their choices and preferences within the bounds of safety and well-being.

In summary, having a support system that is flexible and able to change is vital when working with individuals who present with extreme and severe behavioural challenges because it enables tailored interventions, adapts to changing circumstances, promotes continuous learning, and respects the individual's autonomy and dignity. It enhances the likelihood of success in managing and reducing challenging behaviours while fostering a more collaborative and person-centered approach to support.

7) TEAM HEALTH: AGENCY, TEAM AND INDIVIDUAL LEVEL

Fostering a spirit of cooperation and team building among caregivers when working with behaviourally challenged individuals is essential for maximizing consistency in interventions and creating an environment conducive to positive change. Here are several strategies that PSA recommends to achieve this:

1. **Establish Clear Communication Channels**:
    - **Regular Meetings**: Schedule regular team meetings, whether in person or virtually, to discuss the individual's progress, challenges, and updates on interventions. These meetings should be a platform for open and honest communication.
    - **Shared Documentation**: Maintain shared documentation systems, such as behaviour charts, communication logs, and progress notes. This ensures that all caregivers have access to essential information about the individual's behaviour and any changes in the support plan.

2. **Define Roles and Responsibilities**:
    - Clearly outline each caregiver's roles and responsibilities within the support team. This includes defining who is responsible for data collection, behaviour tracking, implementing specific interventions, and reporting progress.

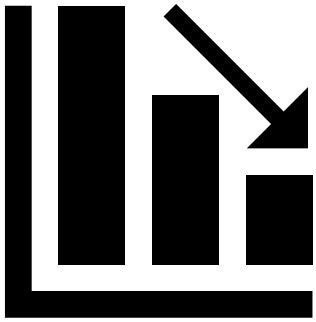
3. **Training and Professional Development**:
    - Ensure that all caregivers receive appropriate training in PSA and the specific support plan for the individual. This training should be ongoing and provide opportunities for skill development and updates on best practices.

4. **Consistency in Approaches**:

    - Collaboratively develop and agree upon consistent strategies and approaches for managing challenging behaviours. Create written guidelines or support plans that outline response strategies to ensure uniformity in implementation.

5. **Data Collection and Analysis**:

    - Implement a standardized data collection system to track the individual's progress. This data should be regularly reviewed and analyzed during team meetings to inform decisions about intervention adjustments.



6. **Feedback and Problem-Solving**:

    - Encourage caregivers to provide constructive feedback to each other without blame or judgment. Create a culture where feedback is seen as an opportunity for improvement.

    - When challenges arise, approach problem-solving collaboratively. Brainstorm solutions together, weigh the pros and cons, and reach a consensus on the best course of action.

7. **Shared Goals and Objectives**:
    - Develop and maintain a shared set of goals and objectives for the individual. These goals should be specific, measurable, achievable, relevant, and time-bound (SMART), and everyone involved should be committed to working toward them.

8. **Supportive Leadership**:
    - If applicable, ensure that supervisors or leaders within the caregiving team provide guidance, support, and oversight. Effective leadership can help maintain consistency and promote teamwork.

9. **Recognition and Appreciation**:
    - Acknowledge and celebrate successes and improvements in the individual's behaviour. Recognize and appreciate the efforts of all caregivers, reinforcing the idea that everyone's contributions are valued.

10. **Conflict Resolution**:
    - Establish a process for resolving conflicts or disagreements among caregivers. Encourage open dialogue and seek common ground when conflicts arise to prevent them from affecting the individual's care.

11. **Maintain a Person-Centered Approach**:
    - Keep the individual's best interests at the forefront of decision-making. Ensure that all caregivers understand the individual's preferences, strengths, and needs and that interventions are aligned with their goals and values.

12. **Continuous Improvement**:
    - Encourage a culture of continuous improvement, where caregivers are open to learning from each other and from the individual. Be willing to adapt strategies based on the evolving needs and progress of the individual.

By implementing these strategies, caregivers can work together effectively as a team to provide consistent, high-quality support to behaviourally challenged individuals.

Study Questions

1) What types of factors are important in determining the “flexibility” of a particular support system?

2) When hiring staff to work with behaviourally challenged individuals, what types of things should we be looking for?

3) What does it take for an agency to demonstrate “perseverance and tolerance” when supporting an individual with severe behavioural challenges?

4) Define the term “consistency” within a support system and discuss ways in which this can be achieved.

5) What are some advantages to having “portability” included in a support plan for a person with behavioural challenges?

6) Provide an example of a “stimulus change” approach from a systems perspective.

7) Provide an example of a “stimulus control” approach from a systems perspective.

8) Provide at least 4 reasons why an individual’s support system needs to be flexible and open to making changes.

9) What do you think are the most important ways to foster team building and health when working with very challenging individuals?

Appendix

Case Study: John's Transition to a Positive Systems Approach

Background: John was a 20-year-old male who spent most of his life in a psychiatric institution due to his Autism Spectrum Disorder, accompanied by frequent and severe aggression towards others and property destruction. He had a very large physical stature (6 feet tall, 250 pounds). His behavior was so extreme that it often required physical restraint, mechanical restraint, and placement in a secure isolation room. The use of contingent electric shock was even considered as a last resort. When John turned 18, he had to leave the facility he was in as it was strictly for children. At the time of referral, this facility had placed him within a separate, secure residence where he was the only one living there. He had a 4:1 staffing ratio and, whenever he was being moved from one room to another, all 4 staff would surround him for transport. The facility had a "code white" which they would use when he went on a rampage and other staff from the facility would immediately come to assist. John's family loved him very much, but the facility advised against them having frequent or close contact with their son because they didn't feel that they could ensure their safety. John was not permitted any trips into the community because of the risk that he was considered to present. The frequency of his aggression and property destruction was very high – averaging over 20 incidents per day of each. Only select staff from the facility were assigned to work with John due to the injury potential. This case was referred to me to start the planning process 4 months before the actual discharge date.

My recommendations to the community agency that was planning to support John included:

- Planning for a separate, self-contained apartment adjoining an existing group home.
- Ensuring that the apartment had special reinforced walls (as John often tended to put holes through them) and plexiglass on the windows. Furniture should be heavy duty and secured to the walls/floor to ensure that he couldn't throw them. The apartment was also constructed with a reinforced metal plate door with a quick locking mechanism so that staff could exit quickly if feeling

threatened. The apartment was also decorated with John's input and included colourful posters on the walls from some of his favourite movies.

- Develop a core team of select staff to work exclusively with John. It was recommended that these staff members have experience in working with aggressive individuals and they needed the opportunity to volunteer for this challenge rather than being simply assigned. Ensure that John's case manager (team leader) for this core team has strong leadership qualities and the ability to remain calm and composed at all times – with a strong interest in building a caring relationship with John. All staff who volunteer for this assignment should be emotionally mature and confident individuals.
- Ensure that, well before John's discharge, there is intensive training provided to the core team in Positive Systems approach and involved in collaborating in developing John's written protocol. This training would involve role playing different scenarios that are likely to occur when dealing with John. I also recommended that the core team leader and clinical support staff (myself, behaviour therapist from our clinical team, and Case Manager) needed to start observing John at his current facility residence with an aim of starting to get to know him, developing a relationship and identifying triggers and maintaining variables contributing to his high rates of aggression and destruction.

Transition to Community Setting: After extensive planning, renovations to his apartment setting, hiring and training his core team, John was discharged into his community setting where a Positive Systems Approach was instituted to address his challenging behaviors. One of the issues that we observed while he was residing within the facility setting, was that none of the staff had developed a relationship with him. He had a large staff team that was constantly changing and rotating across shifts. The approach taken in the facility was a strict behaviour modification protocol which relied exclusively on contingent punishment (i.e. – physical restraint following aggression, followed by a long period of time out within a secure, padded isolation room). We observed that John did not seem at all bothered by physical restraint – in fact, he seemed to seek out the physical challenge of being restrained and rebelled against the authoritarian approach. Furthermore, he seemed to enjoy the power that he appeared to have by intimidating staff – many of whom were clearly reluctant to work with him and exhibited obvious signs of fear and apprehension when around him. We were convinced that our Positive Systems approach would have to emphasize relationship and rapport building and filling

John's day with enjoyable and rewarding activities. We needed to avoid getting into any physical power struggles with him as much as possible and find ways to reward him for absence of aggression/destruction as well as completing various tasks throughout the day. His family played a significant role in planning and implementing his support plan, and they were encouraged to once again become an active part of his life.

System Factors:

The system factors that were addressed in John's support plan included:

Flexibility/Change: This was demonstrated by the supporting community agency in the hiring of the highest ratio of staffing (i.e. – allocating sufficient funding) that they had ever seen and allowing them to start working on John's protocol and participate in training well before he arrived. The agency was flexible in bending their own rules and not requiring that John participate in a day program away from his residence but, instead, they agree to bringing day program activities into his apartment (e.g. – he had a teacher come in on a regular basis to provide tutoring; he was also provided with some vocational tasks to perform as contributed by their local sheltered workshop).

Consistency – achieved by being able to provide a core team of staff with intensive training, developing detailed written protocols and data recording procedures.

Portability – the agency ensured that his written protocol was portable and would follow him no matter what environment he was in.

Intensity: the agency provided a sufficient staffing ratio (minimum of 2:1) to ensure staff safety as well as intensity of reward and stimulation.

Perseverance/Tolerance: The community agency recognized that John was a high risk individual and committed to supporting him for the long-term without having to rely on hospitalization or re-institutionalization by building him a secure and safe environment with a well-trained and confident staff team who were invested in making this work – recognizing that they were entering into a situation where they could experience John's aggression but were still committed to supporting him despite this, with a view towards long-term success. The agency also built into his

apartment closed circuit video cameras to enable them to monitor John when he had escalated, and it was no longer safe for staff to be in his close physical proximity. The video monitoring was also useful for accountability and staff training in order for the supervising clinical team (i.e. – myself and a behaviour therapist) to review recent incidents and discuss the pros and cons on how staff handled this at team meetings.

Team Health – we ensured there was good communication in place with the Team Manager who was John's primary staff and who spent the most time with John. We instituted regular weekly team meetings to review the extensive data and discuss what was working and what was not working. The clinical supervision being provided by myself and one of our behaviour therapists included dropping in on a frequent basis and unannounced times to support the staff team and make ongoing observations.

Behavioral Interventions:

As part of John's written protocol, we included several more traditional behavioural components which included:

1. **Contingency Management System:** A contingency management system was put in place to reward task completion, cleanliness of his apartment, and the absence of aggression and property destruction. This system provided positive reinforcement for desired behaviors and created a structured and predictable environment for John. John was an active collaborator in developing this contingency management system and given his OCD nature, he quickly internalized the reward system and thoroughly enjoyed participating in this. In fact, he would often remind staff when he had "earned' one of his rewards.

2. **Teaching Program:** A comprehensive teaching program was developed to teach John essential coping skills, including: social skills training, communication skills for emotional expression, problem-solving techniques, and anger management strategies like deep breathing. These skills were critical to help him manage his emotions and reduce aggressive behaviors.

3. **Response to Aggression:** Staff members were trained to respond to instances of aggression by first attempting redirection at the earliest sign of escalation.

If redirection was unsuccessful and John continued to escalate, staff would simply remove themselves from John's apartment while monitoring him via closed-circuit cameras. They would re-enter as soon as he had de-escalated and then immediately engaged him in a positive activity. At no time did staff ever display an authoritarian approach, nor did they display any fear or apprehension when around John. This approach avoided getting into power struggles or physical restraint and avoided reinforcing aggressive behavior by not providing him with attention during aggressive outbursts.

4. **Rigorous Data Collection:** Data collection procedures were rigorously implemented to record instances of aggression, property destruction, and evaluate John's progress on his contingency management system. Data were also collected on the frequency and duration of staff leaving his apartment due to aggression or destruction and allowed for continuous evaluation and adjustment of the support plan.

Results: John's transition to the Positive Systems Approach yielded remarkable results:

- **Immediate Reduction in Aggression:** Upon starting the new program in his new community setting, when compared to his facility data, John showed an immediate and drastic reduction in the frequency and intensity of his aggression and destruction.

- **Community Outings:** Within a year of being in his new setting, John demonstrated many consecutive months with no instances of aggression or destruction. At this point, he was even taken on community outings, such as trips to the zoo or haircuts, which would have been inconceivable in his previous institutional setting due to concerns about public safety. He also began to make regular visits to his parent’s home – accompanied by his core team members. This was something that he had not been permitted to do for several years because of it was deemed to be too dangerous for his family members. His family consented to, and actively participated in, following all aspects of his written protocol with the assistance of the staff members that accompanied him.

- **Avoidance of Extreme Interventions:** The positive systems approach successfully avoided the use of extreme interventions that had been used or recommended – such as electric shock, mechanical restraint, physical restraint and secure isolation rooms.

John's remarkable progress demonstrated the power of a person-centered and positive systems approach in transforming the life of an individual with extreme, challenging behaviors. By focusing on building positive relationships, teaching essential skills, and providing a structured, rewarding environment, John's quality of life significantly improved, and his aggressive behaviors were effectively managed. This case underscored the potential of a Positive Systems approach in supporting even the most challenging of individuals within community settings. It demonstrated that, by providing sufficient resources to a community agency that was committed to working with a professional clinical support team and doing whatever was necessary to support challenging individuals, John could be successfully placed in a community setting – and, could do so without relying upon the need for repeated hospitalizations or medication restraints during crisis periods or reliance upon harsh, punitive approaches which would not be tolerated in community settings.

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