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REFRAMING OUR UNDERSTANDING OF INAPPROPRIATE BEHAVIOR AND/OR FEELINGS DISORDERS: WHAT EDUCATIONAL THERAPISTS, SPECIAL EDUCATORS AND COUNSELORS SHOULD KNOW AND UNDERSTAND

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Abstract:
In this paper, the authors have chosen to take a closer look at a socio-emotional behavioral condition known as *Inappropriate Behavior or Feelings Disorder* (IBFD) which is listed in the Educator's Diagnostic Manual of Disabilities and Disorders (EDM; Pierangelo & Guiliani, 2007). The term (or IBFD for short) used in this diagnostic manual is not found anywhere in the current literature including the Diagnostic and Statistical Manual (DSM) and the International Classification of Diseases (ICD). According to the EDM, under the IDEA 2004 enactment, it is one of the criteria for the classification of Emotional Disturbance (ED): "*inappropriate* types of *behavior or feelings* under normal circumstances" (p.163), and it covers social, emotional, physical and psychological aspects of behavior or feelings. Hence, the term *Inappropriate Behavior or Feelings Disorder* is coined from this particular IDEA statement of criterion and, in turn, it is used only in the EDM multi-level coding system. The authors argued the need for educational therapists, special educators and counselors to reframe their current understanding of the IBFD, whose symptoms are similar to disruptive behavior disorders (DBD), within the context of the cognition-conation-affect-sensation (CCAS) framework as they continue to observe, record and evaluate the condition in terms of its

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core symptoms seen, measured and/or profiled before the diagnostic term IBFD is applied under the EDM code ED3.00.

Keywords: affect, aggression, behavior, conation, cognition, sensation

1. What do We understand about Behavior?

The word *behavior* (or behavioral act) is *"[A] generic term covering a wide range of deeds such as acts, activities, responses, reactions, movements, processes, operations, etc."* (Reber, Allen, & Reber, 2009, p.90). Although it has to be a measurable response of any living organism (e.g., amoeba, earthworm, ant, squid, whale, lion, and man), there is still no conclusive agreement among the experts to put some set of coherent limits on the boundaries of denotation of behavior. As the debate continues, one explanation, for example, concerns the difficulty in deciding exactly what activities constitute behavior. Another explanation is that until we know exactly whether behaviors are measurable and/or how behaviors can be best measured, the answer to the question of what behavior is remains elusive.

It is not within the scope of this paper to go into detail on the different theories or models of behavior or behaviorism (see Hunt, 2007, for more detail). Instead, we have chosen to take a selective review of how our understanding of behavior (and hence, behaviorism or behavioral psychology) and its different main or key levels and types as well as the acts associated with each of the behavioral levels/types that have been developed over time.

We have to go back in time when behavior was focused on overt responses – objectively observable and measurable acts or responses (R) – to stimuli (S). Among the many well-known behaviorists is I.P. Pavlov (b.1849-d.1936), who used animals such as a dog to experiment on what is now known as classical conditioning that involved reflexive (involuntary) behavior. Also known as *Pavlovian behavior*, it refers to respondent behavior conditioning that occurs when a *conditioned stimulus* (CS) is paired with an *unconditioned stimulus* (US) at the outset, neutral with respect to the *unconditioned response* (UR), which is paired with the US. After a number of such pairings the CS will elicit, by itself, a *conditioned response* (CR) very much like UR. If the CS is repeatedly presented without reinforcement, the CR weakens and eventually vanishes. The Pavlovian behavior may also include tropisms[ii] – a term Loeb (1900) used

[ii] According to Reber, Allen, and Reber (2009), tropism is "[A] generic term for any unlearned orientation or movement of an organic unit as a whole toward a source of stimulation" (p.836).

to describe all instinctual reactions of earthworms, insects, and even higher animals to external stimuli such as light and temperature. It is also described as stimulus-driven automatous behavior.

E.L. Thorndike (b.1874-d.1947), an American psychologist who was recognized as both functionalist and behaviorist (though he did not see himself as being either one or both), studied the animal behavior and came to formulate a theory of connectionism. Briefly, this theory can be expressed in two laws of behavior. Firstly, the Thorndikean Law of Effect states that the effect of any behavioral (stimulus-response or S-R for short) act determines if it becomes the response (R) to a given stimulus (S) or not. Secondly, the other Thorndikean Law of Exercise states that a R becomes strongly associated to a S in proportion to the number of times it has been connected with that specific event and to the average vigor and duration of the connection. In other words, a behavioral act may develop over time by trial-and-error (not by means of reasoning or insight) as a R to a S, gradually eliminating useless behavioral responses and makes the connection between the appropriate action and the target goal that is to be attained.

Following close to Pavlovian behavior is what we have termed *Watsonian behavior*, i.e., that which J.B. Watson (b.1878-d.1958) chose to focus more on the acts themselves – "*a perspective that attracted him to the work of I.P. Pavlov, whose version of behaviorism was oriented toward physiology and reflexive actions*" (Reber, Allen, & Reber, 2009, p.92). In the Watsonian behavior, an act is anti-cognitive/mentalist to the extreme, and regarded cognitive experiences (e.g., thinking and feeling) that are consciousness-related as mere epiphenomena that accompanied peripheral behaviors (e.g., sublaryngeal movements or visceral and muscular responses). In other words, the Watsonian psychology discards and treats all reference to consciousness and data that come from introspection to interpret consciousness as speculative. The theoretical goal of the Watsonian psychology is prediction and control of behavior.

However, B.F. Skinner (b.1904-d.1990), one of the few early radical behaviorists or neobehaviorists, was "*rather pointedly concerned with the effects that these acts have on the environment*" (Reber, Allen, & Reber, 2009, p.92) as well as "*to determine how behavior is created by external causes*" (Hunt, 2007, p.304). In this way, Skinner (1967) had shifted his focus by circumventing "*the problems associated with the determination of exactly what a behavior is"* (Reber, Allen, & Reber, 2009, p.92). Skinner (1953) also theorized that a behavior positively reinforced is more likely to be repeated, but it is less likely to be repeated if followed by punishment. Like Watson (1913), Skinner (1979) held fast to his extreme behaviorist view and dismissed concepts such as memory, mind, reasoning

and thought as "*subjective entities*" (p.117) that do not exist and are unexplainable (Skinner, 1953).

However, behavior also happens for a reason and every act serves a purpose. E.C. Tolman (b.1886-d.1959) introduced purposeful or purposive behavior, i.e., behavior is goal directed and not controlled by random drives and reinforcements. Termed as Tolmanian behavior, it also includes latent (not subliminal) behavior, which the information acquired by an individual is stored internally and has not yet reflected or expressed in any form of overt behavioral act (Tolman, 1932).

Finally, C.L. Hull (b.1884-d.1952), whose professional background was in engineering, was an excellent student in mathematics and numbers. Hull started his career as a mining engineer. However, he suffered an attack of poliomyelitis and became partially crippled. He switched to behavioral psychology and started to make the field of behaviorism into a quantitatively exact science by incorporating scientific laws and numerical knowledge in psychology, postulating "*a number of factors, each of which, he held, enhances, limits, or inhibits the formation of such habits (or acts), and his development of equations by which one could calculate the exact effect of each of those factors*" (Hunt, 2007, p.302), i.e., he created a formula to illustrate the stimulus-response process. The Hullian central concept of behavior remains a familiar one: "*behavior consists of sets of chains of linked habits, each of which is an S-R connection that developed as a result of reinforcement*" (Hunt, 2007, p.302). This is the Hullian version of the Thorndikean Law of Effect. Hull (1943) even went on to create an equation to "*calculate the extent to which any given number of repetitions of a reinforced behavioral act increases the strength of the learned or acquired habit*" (p.119): ${}^{N}{}_{S}H_{R} = M - Me^{-iN}$, where ^{N} represents the number of reinforced trials, ${}_{S}H_{R}$ represents the relationship between the afferent and efferent nerve impulses in the specific act, and M represents the physiologically maximum strength of that particular habit minus … and it goes on and on. He also sought to explain the behavioral acts of learning and motivation by biological laws of behavior: e.g., the Mathematico-Deductive Theory (Hull et al., 1940) and the Principles of Behavior (Hull, 1943). His model of behavior can be expressed summarily in the following process: an individual suffers some form of deprivation → deprivation creates needs → needs activate drives → drives activate behavior, which is directed at attaining a target goal with survival value. In other words, this is empirical (experiential) behavior which we have termed as Hullian behavior.

There are still many more different types of behavior not mentioned or described here. From the above brief description of the different types of behavioral acts, they can be represented diagrammatically in the following Figure 1 below.

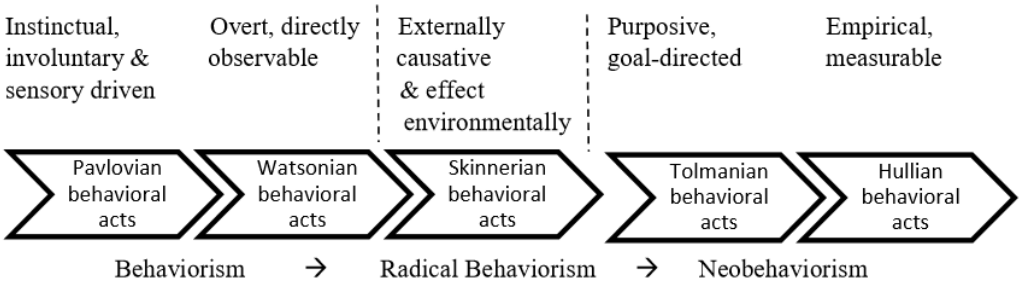

Figure 1: The Five Selected Types of Behavioral Acts

Table 1 summarizes the selected five key levels and types of behavioral manifestations that can help those working with individuals with behavioral challenges to understand the different behavioral acts being displayed:

Table 1: Selected Levels of Behavioral Manifestations

Researchers (birth-death)	Behavioral Levels & Types	Behavioral Acts (with selected examples)
I.P. Pavlov (b.1849-d.1936)	Level #1: Pavlovian behavior	Reflexive/involuntary behavioral acts E.g., one's ears involuntarily pick up noises in a crowded place; this is not the same as eaves-dropping which is a deliberate act.
J.B. Watson (b.1878-d.1958)	Level #2: Watsonian behavior	Explicit/directly observable behavioral acts E.g., a student is reading a storybook aloud.
B.F. Skinner (b.1904-d.1990)	Level #3: Skinnerian behavior	Effects of behavioral acts on the environment (e.g., a child throws temper tantrum on a busy street and attracts unwanted attention from the passers-by who may look annoyingly at his parents.
E.C. Tolman (b.1886-d.1959)	Level #4: Tolmanian behavior	Goal-directed behavioral acts E.g., an explorer makes a cognitive/mental map of how to get his destination from his base camp since he has lost his compass.
C.L. Hull (b.1884-d.1952)	Level #5: Hullian behavior	Empirical/experiential behavioral acts are consisted of a number of factors that can be expressed in equations to calculate the exact effect of each of those factors. E.g., a 7-year-old child keeps displaying serious difficulties in both communication and socialization is tested on ADOS-2 to confirm his autistic condition.

Understanding the different levels, types and acts of behavior can help educational therapists, special educators and counselors to better understand behavioral challenges so that they can plan or design appropriate treatment plans to meet their clients' needs.

For example, if a person is hungry because he has missed his breakfast and lunch, the smell of pizza freshly baked will cause him to salivate. This is a Pavlovian behavioral act – a reflexive (involuntary) act. In another example, a student, who cannot recognize words accurately, often misreads unfamiliar words or finds spelling words difficult, he is performing some Watsonian behavioral (overt, directly observable) acts. If the student is seen and formally assessed by a psychologist or therapist using standardized tests[iii], the test results will provide equivalent ages for the student's literacy behavioral (measurable) acts in terms of word recognition age, reading (single words) age and/or spelling age in comparison to his chronological age. These equivalent ages help to identify those literacy skills that the student is having difficulties, i.e., the Hullian behavioral acts that can be expressed in the following formula: RP → Stg {B [T (Ddg + Cp) + M] + P} → RO, where RP is reading process and RO is reading outcome (Chia, 2007). The reading process consists of several measurable key factors: Ddg = Decoding, Cp = Comprehension, T = Thinking, M = Motivation, P = Purpose, B = Background Knowledge and Prior Experiences, and Stg = Setting, where the reading activity takes place. For example, T can affect Ddg by monitoring the words read and knowing their meanings. T can also affect Cp by modifying the reader's perception and understanding of what has been read/decoded. In addition, B can enhance the reader's reading performance (Ddg) as well as his/her comprehension (Cp). With a conducive Stg and enriched B, these causative factors will determine the reader's performance in Ddg and Cp (Skinnerian behavioral act). If the results from Ddg and Cp performance are positive, the reader will, in turn, develop a positive reading attitude/motivation to read (Skinnerian behavioral act) and also to read for a purpose (Tolmanian behavioral act).

Reading is a form of learning (or learning to read) and it can be exceedingly laborious, or even hazardous, if an individual has to rely solely on the effects of his/her own action to inform him/her what to do (e.g., recoding an unfamiliar or new word by segmenting it into its constituent letters to sound them out before blending these letter sounds or phonemes together to say the word). Fortunately, most human behavior is learned observationally through modeling, i.e., "*from observing others, one forms an idea of how new behaviors are performed, and on later occasions, this coded information serves as a guide for action"* (Bandura, 1977, p.22).

[iii] Examples of standardized tests: Word Recognition & Phonics Skills Test (for word recognition and phonics skills), Burt Reading Test (for single word reading) and Gray Oral Spelling Test (for word spelling).

2. A Brief Introduction to Aggressive/Challenging Behavior

Today, many parents are complaining, making police reports and applying for the Beyond Parental Control (BPC) order via the Juvenile Court against their own children aged below 16 who display severe behavioral problems unmanageable by their parents (SG Legal Learning Center, 2011). Teachers are also encountering more and more students with aggressive or challenging behavior in class or school.

Aggression or aggressive behavior (e.g., violence and bullying) is the most serious of inappropriate behaviors with most serious consequences for the aggressor or perpetrator of the aggressive behavioral act(s) and those around him/her. Such uncalled acts of aggression or challenging behavior includes gang affiliation, attention-gaining, escapism, power and control, and self-gratification. According to Wood, Cowan and Baker (2002), "*appropriately half of the variance in sociometric and teacher ratings of peer rejection was accounted for by aggression and social withdrawal for boys and girls*" (p.72).

Currently, there is no one universally accepted definition of aggressive behavior. However, there are still some agreements that it involves injuring others, gaining something for the aggressor and suffering from both injury and extraneous gains. Long and Brendtro (1993) define aggressive behavior as "*a spontaneous, impulsive act of danger … observable behavior which can depreciate, threaten, or hurt a person or destroy an object … unplanned and usually occurs during times of stress … viewed as a loss of self-control or an impulse break-through*" (p.3). In other words, aggression involves observable behavioral acts (Watsonian behavior), spontaneous, impulsive and unplanned (Pavlovian behavior) and usually happens in time of stress (Skinnerian behavior) resulting in loss of self-control or impulse break-through.

According to Chia and Wong (2014), "*aggressive or challenging behavior can be either proactive or reactive*" (p.70). On the one hand, the proactive challenging behavior is observed among those who have difficulties in expressing their views, needs or wants. "*It is also common among young children who have yet to develop fluent speech to verbalize their needs or wants. These children are not angry or emotional but resort to such behavior to get what they want"* (Chia & Wong, 2014, p.70). On the other hand, the reactive challenging behavior can happen suddenly as an impulsive *"response to some frustration, provocation or perceived threat, resulting in causing hurt or injury to others*" (Chia & Wong, 2014, p.70). Those with such aggressive behavior manifest reactive temperament and poor social skills, and they are often disliked by their peers (Vitaro et al., 2006). In many of such cases, according to Vitaro et al. (2006), they live in a harsh environment.

Aggressive behavior can refer to those behavioral acts – verbal (e.g., cursing vulgarity, name-calling and verbally threatening), non-verbal (e.g., body language that communicates anger, frustration, humiliation and/or rage), or physical (e.g., biting, fighting, hitting and vandalizing) – that cause injury directly or indirectly to people, animals and/or things around, resulting in extraneous gains for the aggressor. Chia (2013) has classified aggressive behaviors into four categories: (1) physically, directly aggressive, e.g., biting, grabbing, hair-pulling, hitting, pinching, pushing, self-injury, and spitting; (2) physically, indirectly aggressive, e.g., cutting oneself with a sharp instrument, and pinching or slapping oneself; (3) verbally, directly aggressive, e.g., cussing at others, name-calling, taunting, and threatening; and (4) verbally, indirectly aggressive, e.g., alleging others for something untrue, betraying a trust, excluding others from activities, and spreading rumors about others (see Figure 2 below).

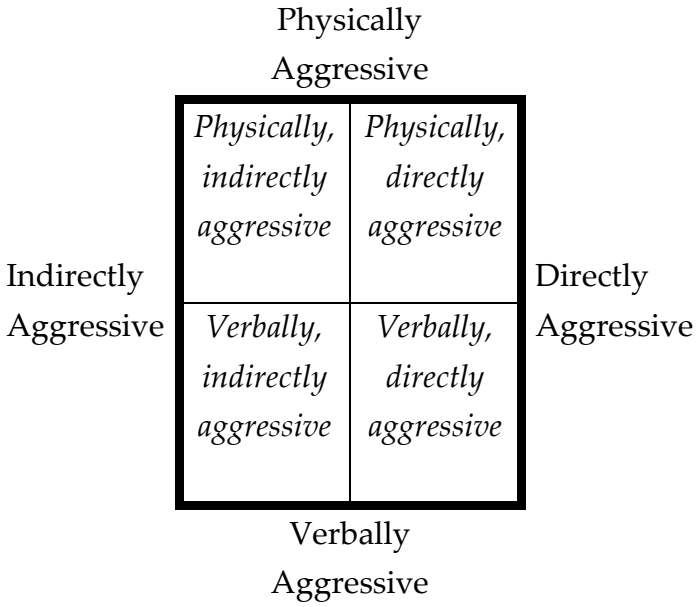

Figure 2: The Four Categories of Aggressive Behavior

Hunt (1993) has identified and described five neurobiological patterns of aggressive behavior (p.16-18) as follows:

Neurobiological Pattern Type 1: Affective aggression. This is ragefully aggressive behavior whose acts appear chronically angry, resentful and hostile. Such an individual often displays poor anger management.

Neurobiological Pattern Type 2: Impulsive aggression. Generally, quiet and passive, an individual with impulsive aggressive behavior has a low tolerance level of

frustration. Such a person with poor impulse control can be uncharacteristically destructive when he/she explodes into a flurry of violent activities.

Neurobiological Pattern Type 3: Instrumental aggression. An individual of instrumental aggressive behavior is often an intimidating bully who wants his/her own way by verbally, non-verbally or physically threatening others. For example, in the competitive marketing business, a sales manager constantly threatens to dismiss his sales executives regardless of their sales performance whenever they disagree with his instructions or suggest ideas that seem to threaten his position or not to his liking.

Neurobiological Pattern Type 4: Over-aroused aggression. This form of aggressive behavior is characterized by a high activity level that often results in accidents and aggressive incidents. An individual with such aggressive behavior does not choose his/her victims. The person often provokes or initiates aggressive responses from others because of their inappropriate behavioral acts. For example, an adolescent, who thought of something funny, innocently tells his girlfriend an offending sexist joke, hurts her feeling, and results in being kicked on his groins, hit on his shoulders with some hard object and slapped on his face by the girl.

Neurobiological Pattern Type 5: Predatory aggression. An individual with such aggressive behavior is someone who waits for an opportunity to get back at others in a hurtful or harmful manner. Such a person is often seen as revengeful. It can be someone who defends himself against his own unconscious impulses or qualities (positive and negative) by denying himself at fault while attributing the problem(s) to others. This is known as victim blaming – an example of psychological projection. It is one of the several types of projective behavioral acts, which include projection of marital guilt, bullying, projection of general guilt, and projection of hope.

There is no one cause and/or antecedent of aggressive behavior. According to Patterson, DeBaryshe and Ramsey (1989), it "*appears to be a developmental trait that begins early in life and often continues into adolescence and adulthood*" (p.329). Family variables such as harsh parenting style, poor parental discipline and supervision, dysfunctional family background and absent parents have somehow or somewhat caused a young child to grow up and develop inappropriate or challenging behavior. Moreover, individuals, who (1) are rejected by their peers because of their poor social skills (Dubow, Huesmann, & Eron, 1987); (2) experience frequent academic failure (Patterson et al., 1989); (3) have been exposed to media violence and hence become desensitized to aggressive and/or violent behavioral acts; and (4) have encountered instances of feeling angry, frustrated and/or humiliated, are variables that contribute to an individual developing challenging or aggressive behavior when he/she grows up. These variables

are considered risk factors that can be categorized under two types (Kaiser & Rasminsky, 2012): (1) biological risk factors, e.g., genetic influences, temperament, pregnancy complications, substance abuse during pregnancy, and neurological problems; and (2) environmental risk factors, e.g., parenting style, family background, peers, poverty and the conditions surrounding it, exposure to violent media, and turbulent times.

There are also protective factors – known as resilience (Werner, 2000) – that play an essential role in counteracting risk factors. Resilience is a dynamic, developmental process that depends on a given context to provide a strong sense of self-efficacy (e.g., belief in self-worth) and possesses an internal locus of control (e.g., ascription to own efforts for success rather than luck) (Luthar, Cicchetti, & Becker, 2000). According to Kaiser and Rasminsky (2012), "*the more protective factors there are and the better they balance the risk factors, the more likely it is that a child will meet the challenges in his life and turn out to be a competent and caring individual*" (p.43). Kaiser and Rasminsky (2012) have listed three categories of protective factors: (1) the individual factors, e.g., an out-going temperament, a good sense of humor, and an optimistic outlook for the future; (2) the family factors, e.g., a loving family relationship that sets the foundation for a wide array of skills such as "*well-modulated emotions, a sense of self-efficacy, academic achievement, mastery of motivation, and sociability with peers*" (Kaiser & Rasminsky, 2012, p.46); and (3) the community factors, e.g., churches, temples and community centers that help in fostering resilience, making an individual feel loved and valued, and to some extent, can compensate for a challenging family background.

Among the many aggressive or behavioral challenges are the emotional and behavioral disorders (EBD) that have also been termed as *Emotional Disturbance* (ED), which is one of the 13 disability categories listed and recognized under the Individuals with Disabilities Education Act (IDEA) 2004 in the United States. The widely known attention-deficit/hyperactivity disorder (ADHD) is often mistaken for EBD or ED. It is not included in this category of EDM Level I ED but is classified in the EDM Level I disability category of Other Health Impairments (OHI) under Level II OHI8.00. We shall discuss more about ED in the following section.

3. Nosology of Emotional Disturbance (ED)

According to the Educator's Diagnostic Manual of Disabilities and Disorders (EDM; Pierangelo & Giuliani, 2007), the prevalence of ED constitutes the fourth highest disability group, i.e., 8.1% of the total number of students age six to twenty-one who

receive special education services under the federal government's disability categories (US Department of Education, 2004). The term ED remains a source of debate and discussion among the professionals and has been challenged even at the federal level (Hunt & Marshall, 2005). One of the main challenging concerns is the operating definition of ED and the vague descriptors of its traits. For instance, what does it mean by "*inappropriate types of behavior or feelings under normal circumstance*" (as listed in the definition under IDEA 2004)? Moreover, there is still no single reliable and/or valid measure/tool to identify the diagnostic markers of the condition.

The EDM multi-level coding system has categorized ED into the following specific disorders (EDM Level II) as well as specific types of the specific disorders (EDM Level III) (see EDM, 2007, pp.153-179):

EDM Code Level I	*Disability Category (under the IDEA 2004 disability categories)*		
ED	Emotional Disturbance		
EDM Code Level II	*Specific Disorders*		
ED1.00	Emotional Disturbance by Exclusion		
ED2.00	Relationship Problems Disorder		
ED3.00	Inappropriate Behavior or Feelings Disorder (IBFD)		
	EDM Code Level III	*Specific Types of Disorders*	
	ED3.01	IBFD-Aggressive Interactive Type (IBFD-AIT)	
		Proposed EDM Code Level IV	*Specific Subtypes*
		ED3.01a	IBFD-AIT-Physical
		ED3.01b	IBFD-AIT-Verbal
	ED3.02	BFD-Disruptive Behavior Type	
	ED3.03	IBFD-Immaturity Type	
	ED3.04	IBFD-Impulse Control Type	
	ED3.05	IBFD-Self-Destructive Behavior Type	
	ED3.06	IBFD-Not Otherwise Listed	
ED4.00	Pervasive Mood Disorder		
ED5.00	Physical Complaints Disorder		
ED6.00	Anxiety Reactive Disorder (ARD)		
	EDM Code Level III	*Specific Types of Disorders*	
	ED6.01	Panic Reactive Disorder	
	ED6.02	School Avoidance ARD	
	ED6.03	School-Related ARD	
	ED6.04	Separation ARD	
	ED6.05	Social Avoidance ARD	

	ED6.06	Social-Related ARD
	ED6.07	Unfounded ARD
ED7.00	Schizophrenia	
ED8.00	Psychological and Psychiatric Disorders Already Diagnosed by Mental Health Professionals-Be Very Specific *(refer to post-EDM classification[iv])*	

4. The Specific Types of Emotional Disturbance within the CCAS Framework

The framework of Cognition-Conation-Affect-Sensation (CCAS) is used in order to better understand the specific types and/or subtypes of ED discussed in the previous section. Briefly, the early version of the CCAS model did not have Sensation (Sn) as one of the main components. This earlier CCA model included the original three behavioral potentials that Poland (1974) had identified to be present in an individual at birth and throughout his/her lifespan development. According to Poland (1974), the cognitive behavioral potential is associated with intellectual thinking, problem solving, logical reasoning ability, memory, attention, and planning. Next, the conative behavioral potential, which is of constitutional origin, is associated with observable actions such as eating, running, arguing, or drawing and these behavioral acts can be voluntary (e.g., drinking) and habitual (e.g., clearing throat each time before making a speech) (Poland, 1974). Finally, the affective behavioral potential covers moods, emotions and feelings. Often the affective behavioral traits are more covert (internalized) than overt (externalized). Hence, these traits are not directly observable, but can be manifested through activities that are being carried out (Poland, 1974) in response to the stimuli that trigger them.

As already mentioned, Poland's (1974) model only consists of CCA without Sn. Chia (2011) added a fourth component, i.e., Sensation (Sn), that has helped to link up the three behavioral potentials to form a complete model of behavioral potentials (see Figure 3).

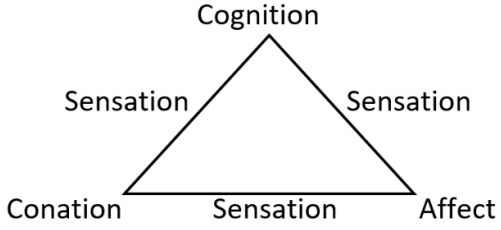

Figure 3: The CCAS Model of Behavioral Potentials (Chia, 2011, p.9)

[iv] Post-EDM classification refers to any other formal classification systems (e.g., DSM and ICD) revised, updated and/or published after the publication of EDM in 2007.

The sensory behavioral potential (sensation or Sn for short) involves both exteroceptive senses (i.e., external senses that involves visual, auditory, haptic, olfactory and gustatory) and interoceptive senses (i.e., vestibular and proprioceptive senses). Besides, the Sn also concerns the S-R process that can be illustrated with a simple formula postulated by Hull (1943): $_{s}E_{R} = {}_{s}H_{R} \times D \times V \times K$ where $_{s}E_{R}$ is excitatory potential (i.e., likelihood of an organism to produce a response R to the stimulus S); $_{s}H_{R}$ is the habit strength that is derived from previous conditioning trials; D is the drive strength that is determined by, for instance, the hours of deprivation of food and water; V is the stimulus intensity dynamism (i.e., some stimuli have more or greater influences than others); and K is the incentive (i.e., how appealing the result of the action is). This formula was further improved by Hull (cited in Scriven, 1961) and became $_{s}E_{R} = V \times D \times K \times J \times {}_{s}H_{R} - I_{R} - {}_{s}I_{R} - {}_{s}O_{R} - {}_{s}L_{R}$, where I_{R} is reactive inhibition caused by continual performance of a behavior that dissipates over time); and $_{s}I_{R}$ is conditioned inhibition caused by continual performance of a behavior that does not dissipate over time. It is not within the scope of this paper to cover this aspect, but readers can refer to Hull (1943) for further detail.

Within the CCAS framework, the different types of ED (i.e., ED1.00 to ED7.00) as presented in Figure 4 provides educational therapists, special educators and counselors a totally new perspective on the varied conditions of ED. The CCAS framework can be arbitrarily cut in two ways: (1) cut horizontally into two equal halves with the top part representing the learning or verbal ability and the bottom part representing the behavioral or nonverbal ability; and (2) cut vertically into two equal halves, the left bottom quarter portion represents externalizing or overt acts that can be seen, while the left top quarter portion as well as right full half (or two right quarters) represents internalizing or covert acts that are not observable but they can be manifested through the overt acts.

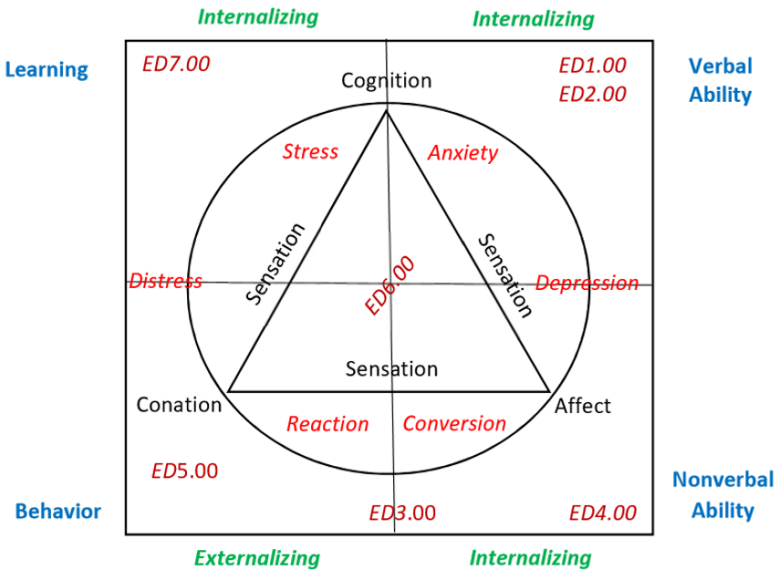

Figure 4: The Specific Types of ED within the CCAS Framework

As a result of the horizontal and vertical dissections of the CCAS framework, there are four behavioral quadrants: (1) cognitive stress; (2) cognitive anxiety; (3) affective conversion; and (4) conative reaction.

First Behavioral Quadrant – Cognitive stress (covert/internalized): This refers to any stress that is a state of mental or emotional strain or tension resulting from adverse or demanding circumstances. It can also refer to "*any situation (positive or negative) that requires adjustment or change*" (Foxman, 2004, p.9); it can simply be known as the stress factor.

Second Behavioral Quadrant – Cognitive anxiety (covert/internalized): According to Seligman, Walker, and Rosenhan (2001), anxiety is an emotion characterized by an unpleasant state of inner turmoil, often accompanied by nervous behavior, such as pacing back and forth, somatic complaints, and rumination. It can also *"a state of apprehension or worry about a danger or threat that might occur"* (Foxman, 2004, p.9); it can simply be known as the anxiety factor.

Third Behavioral Quadrant – Affective conversion (covert/internalized): Conversion behaviors cannot be directly seen. These internalizing behaviors are dynamic and they change slowly or quickly over time. The affective conversion behavior is essential for an individual's survival in a competitive environment as he/she learns to adapt. It can also be "*a state of fear when danger or threat catches us by surprise*" (Foxman, 2004, p.9); it is also known as the fright factor.

Fourth Behavioral Quadrant – Conative reaction (overt/externalized): Reactive behaviors are observable responses to internal or external stimuli. Such a behavioral

response involves some kind of an act to perform a task in order to engage the stimulus to a certain level of satisfaction or fulfilled expectation. It can also be "*an instinctive reaction to a clear and present danger or threat*" (Foxman, 2004, p.9); it is also known as the fear factor.

When the third and fourth behavioral quadrants overlap on each other, the effect resulted from this overlap can be either some kind of a socio-emotional behavioral reaction or response. According to Mertz (2017) as well as Chia and Lim (2017a), there is a subtle difference between reaction and response. For example, as explained by Chia and Lim (2017a), "*[W]hen a person reacts, s/he is taking a defensive stance because s/he is at a disadvantage. Hence, in reaction, it is the emotion that takes the central role and this can lead to a downside, i.e., the loss of control. Not every reaction is bad. There is also an upside and it is what we often call it 'passion,' which focuses on a purpose (Tolmanian behavior) of why the person reacts in that manner*" (p.5). However, a response "*is on the flipside of reaction and it is more thoughtful because it involves some rational thinking or reasoning … Although response may seem passive, its upside is an engaging opportunity that is considered positive and more civilized*" (Chia & Lim, 2017a, p.5). This is known as socio-emotional maturity which consists of two developmental strands: social maturity (Kegan, 1982) and emotional maturity (Erikson, 1959, 1968) (see Chia & Lim, 2017a, for detail).

Within the CCAS framework, all the different types of ED can be found and placed in the respective four behavioral quadrants as well as between the behavioral quadrants: (1) the first quadrant on cognitive stress includes ED7.00-Schizophrenia which includes thought disorder and disperception[v]; (2) the second quadrant on cognitive anxiety includes ED1.00-Emotional Disturbance by Exclusion, and ED2.00-Relationship Problems Disorder; (3) the third quadrant on affective conversion includes ED4.00-Pervasive Mood Disorder; (4) the fourth quadrant on conative reaction includes ED5.00-Physical Complaints Disorder; (5) between the third and fourth quadrants is ED3.00-Inappropriate Behavior or Feelings Disorder and all its specific types; and (6) between the second and fourth quadrants is ED6.00-Anxiety Reactive Disorder and its specific types including subtypes.

In this paper, the main focus is on ED3.00-Inappropriate Behavior or Feelings Disorders (IBFD) (Level II) and its specific types (Level III). We shall discuss them further in the next section.

[v] The term *disperception*, literally means dysfunctional perception, is not the same as misperception or wrong perception. The term is used by many naturopathic physicians in reference to a mild form of schizophrenia as they have argued that "the term schizophrenia is inadequate and misleading, except for the most severe cases, especially those are thought to be suicidal, homicidal, and those who have lost touch of reality" (Cooke-Goff, 2012, para.2).

5. What is Inappropriate Behavior or Feelings Disorder (IBFD)?

According to the EDM (Pierangelo & Guiliani, 2007)[vi], among the five criteria[vii] for a classification of emotional disturbance (ED) under the IDEA 2004 enactment [34 C.F.R. 300.7(c)(4)] is the third criterion "*(c) Inappropriate types of behavior of feelings under normal circumstances*[viii]" over a period of time and to a marked degree that adversely affects an individual's academic performance. Using this third criterion, Pierangelo and Giuliani (2007) associated it with symptoms of disruptive behavior disorders. They stated that this category is set aside for diagnoses (e.g., oppositional defiant disorder, conduct disorder or disruptive behavior disorder) that have not been previously diagnosed by an external mental health professional (e.g., psychiatrist, psychologist and counselor), and added that "*it is not the responsibility of the multidisciplinary and IEP team to diagnose a child with these disorders. The role of the … team should be to determine whether the child meets the criteria for an emotional disturbance as defined by IDEA*" (EDM, 2007, p.163-164). In case, an individual has already been identified as having oppositional defiant disorder, conduct disorder or disruptive behavior disorder, the term assigned to describe the condition should be ED 8.00-Psychological and Psychiatric Disorders already diagnosed by mental health professionals and specifically state the medical diagnosis (see Pierangelo & Giuliani, 2007, p.178).

In this paper, as already mentioned earlier, the main focus is on ED 3.00 Inappropriate Behavior or Feelings Disorders (IBFD), which "*is characterized by behaviors inappropriate to the situation or highly volatile*" (Pierangelo & Giuliani, 2007, p.164). It is essential to document an individual suspected to have IBFD in terms of the degree of severity of the condition and its significant deviation from expectations in terms of age, gender and culture across different contexts. The behavioral symptoms of IBFD include "*bizarre verbalization, over-reaction, repeated recitation of words, fetishes, and obsessive and compulsive behaviors … may include inappropriate sexual behaviors such as inappropriate touching of others, public masturbation, or unusual or provocative sexual verbalization … negative self-statements as well as feelings that are reflected in and inferred from observable behavior*" (Pierangelo & Giuliani, 2007, p.164).

[vi] EDM and Pierangelo & Giuliani (2007) will be used interchangeably throughout this paper to refer to the same multilevel coding system of categorizing the IBFD subtypes.

[vii] The other four criteria include (a) an inability to learn that cannot be explained by intellectual, sensory, or health factors; (b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (d) a general pervasive mood of unhappiness or depression; and (e) a tendency to develop physical symptoms or fears associated with personal or school problems.

[viii] This third criterion is (c) inappropriate types of behavior or feelings under normal circumstances.

Under the EDM Code ED3.00 for IBFD (Pierangelo & Giuliani, 2007, pp.164-165), three main symptoms must be present in order to confirm an individual with that condition. They are:

i. an over-reaction (including becoming defensive without provocation, non-compliant or passive-aggressive behavior, extreme responses to changes in routine/schedule, excessive emotional responses, lack of or limited or excessive self-control or impulsive, low frustration tolerance, rapid changes in behavior or mood, wide mood swings;
ii. bizarre verbalization and repeated recitation of words or refusal to respond to others or to cooperate; and
iii. fetishes and obsessive and compulsive behaviors (possibly due to overly perfectionistic or hard on self.

The EDM category of IBFD can be further divided and classified under Level III specific types. The core symptoms of each of these specific types of IBFD will be briefly described below.

ED3.01: Inappropriate Behavior or Feelings Disorder-Aggressive Interactive Type

This first specific type of IBFD (see Figure 5) can be either (a) physical aggressive interactive type or (b) verbal aggressive interactive type. The former falls in the fourth quadrant of conative reaction since its Watsonian behavioral acts are more overt and directly observable. The latter falls in the first quadrant of cognitive stress and/or second quadrant of cognitive anxiety within the CCAS framework.

The core/invariant symptoms of IBFD-Aggressive Interactive Type have been summarized as follows (see EDM, 2007, pp.165-166):

i. Verbal/physical confrontation, i.e., verbal or physical hostility;
ii. Verbal/physical aggression, i.e., cursing with swear words of vulgarity, fighting, biting, kicking, throwing objects, temper tantrums with directed aggression; and
iii. Intimidation, i.e., verbal threats of physical harm to people or animals.

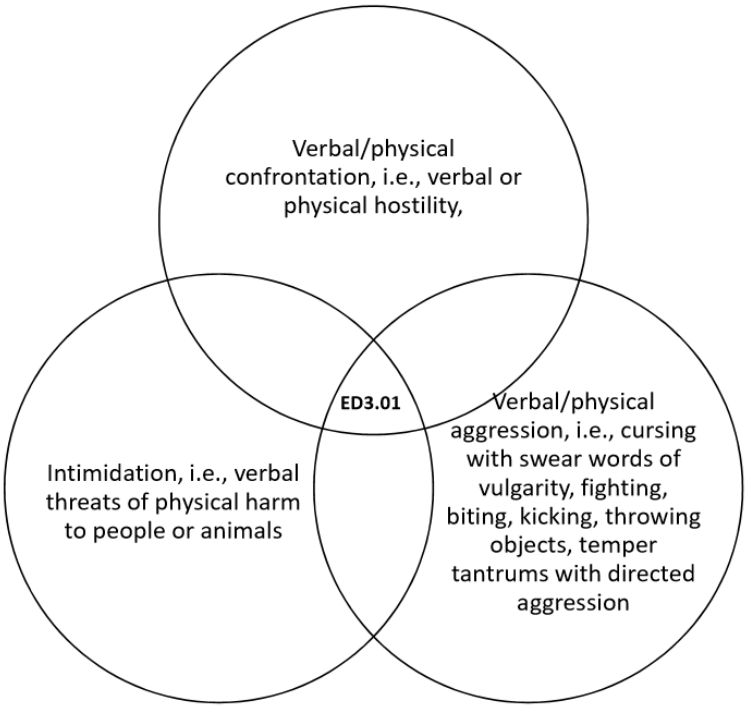

Figure 5: IBFD-Aggressive Interactive Type

ED3.02: Inappropriate Behavior or Feelings Disorder-Disruptive Behavior Type

This second specific type of IBFD (see Figure 6) falls in the fourth quadrant of conative reaction since its Watsonian behavioral acts are more overt and directly observable.

The core/invariant symptoms of IBFD-Aggressive Interactive Type have been summarized as follows (see EDM, 2007, pp.166-167):

i. Outwardly rebellious by nonconforming to the rules of authority, disturbance of conduct or oppositional behavior, behaviors of defiance, resorting to physical threats or personal insults, unwillingness to follow classroom or school rules, stealing, not taking responsibility for inappropriate behaviors or feelings, walking in and out of classroom without authorization;
ii. Vandalism and trespassing, i.e., causing property loss or damage, touching other people's property, stealing things from others and show a complete disregard for the property of others (includes taking things from others without permission and insisting that he/she has borrowed or being lent to); and
iii. Ill-mannerism, i.e., persisting in speaking without being recognized, repeatedly answering a handphone, showing disregard for the rights of others, touching other people, lacking personal boundaries and open violation of societal norms and rules.

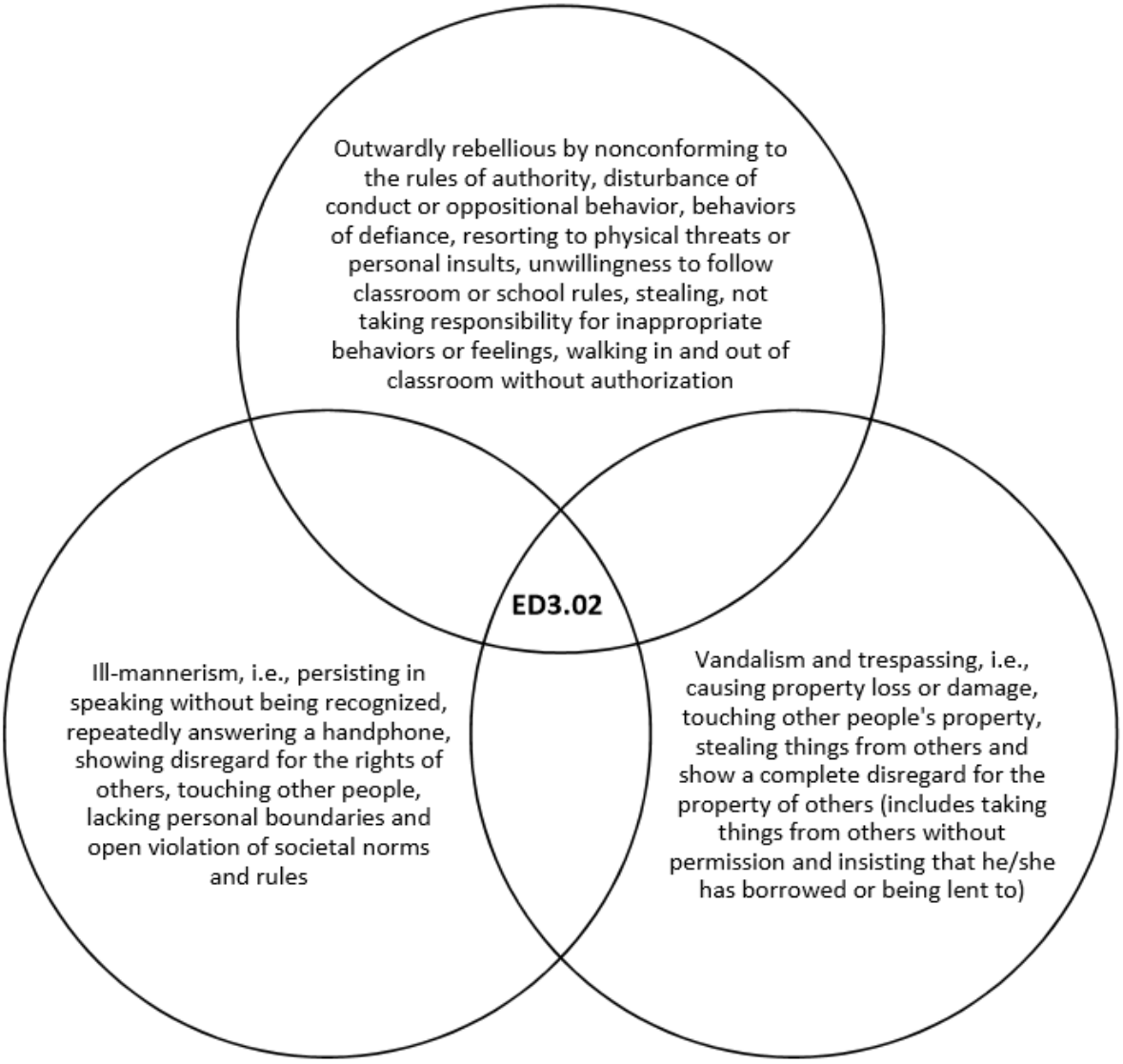

Figure 6: IBFD-Disruptive Behavior Type

ED3.03: Inappropriate Behavior or Feelings Disorder-Immaturity Type

Like the previous ED3.02, this third specific type of IBFD (see Figure 7) falls in the fourth quadrant of conative reaction since its Watsonian behavioral acts are more overt and directly observable.

The core/invariant symptoms of IBFD-Immaturity Type have been summarized as follows (see EDM, 2007, pp.166-167):

i. Needing to be the center of attention, whining, demanding, constant clinging behavior to the teacher and other adults;
ii. Temper tantrums without physical aggression, frequent crying, complaining to get own way/demand; and

iii. Ill-mannerism, i.e., using lewd or obscene gestures, making noises in class (e.g., burping), ignoring instructions from the teacher or others.

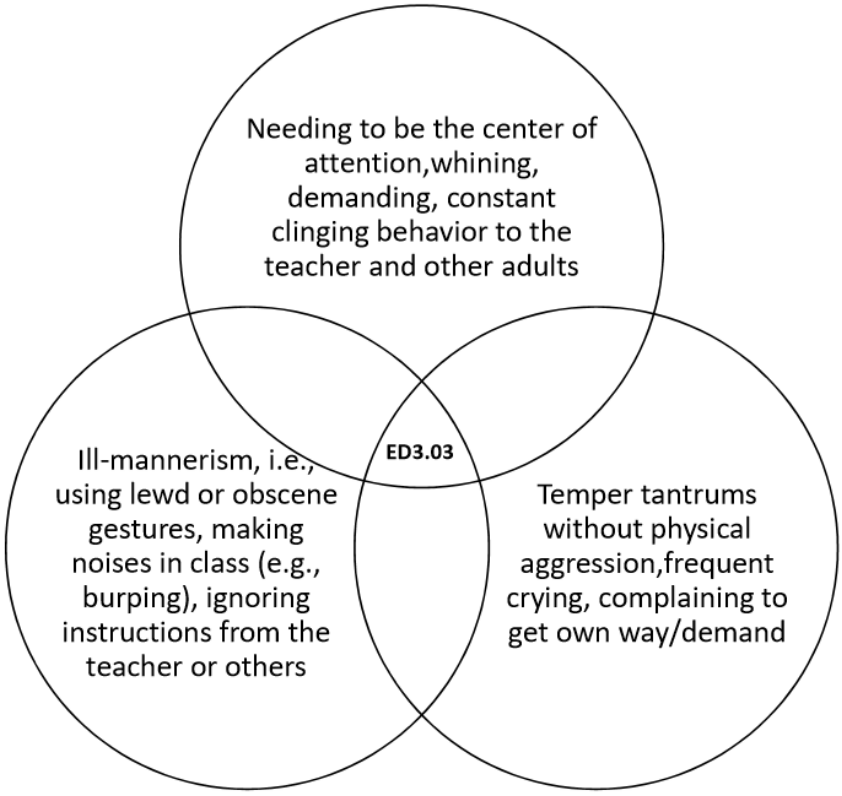

Figure 7: IBFD-Immaturity Type

ED3.04: Inappropriate Behavior or Feelings Disorder-Impulse Control Type

Like ED3.02 and ED3.03, this fourth specific type of IBFD (see Figure 8) also falls in the fourth quadrant of conative reaction since its Watsonian behavioral acts are more overt and directly observable.

The core/invariant symptoms of IBFD-Impulse Control Type have been summarized as follows (see EDM, 2007, pp.167):

i. Inability to curb own immediate reactions or think before he/she acts or does something, e.g., blurt out inappropriate comments, display emotions without restraint, or act without consideration for consequences;
ii. Shows no regard for the later consequences of his/her poor conduct with la belle indifference; and
iii. Inability to wait patiently and prefer to do things impulsively to get an immediate but small payoff rather than engage in activities that may take more effort yet provide much greater by delayed rewards.

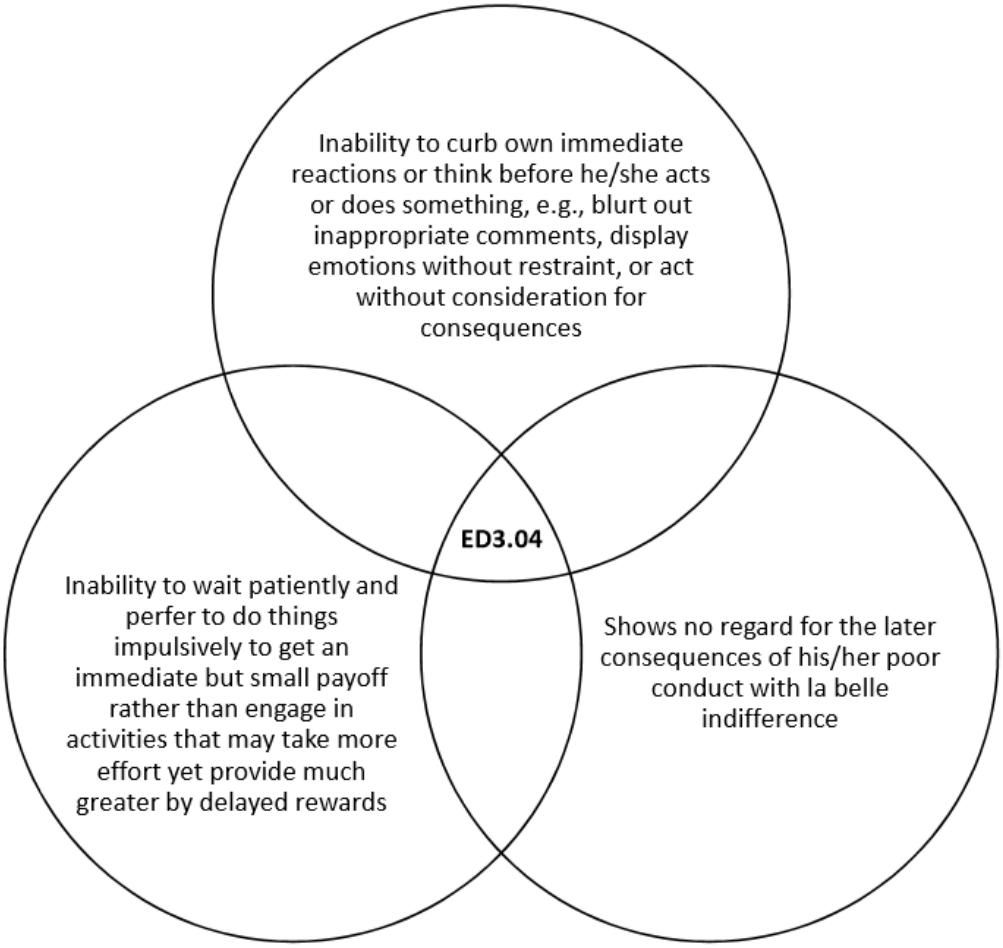

Figure 8: IBFD-Impulse Control Type

ED3.05: Inappropriate Behavior or Feelings Disorder-Self-Destructive Behavior Type

Like the three previous ED3.00 specific types (i.e., from ED3.02 to ED3.04), this fifth specific type of IBFD (see Figure 9) also falls in the fourth quadrant of conative reaction since its Watsonian behavioral acts are more overt and directly observable.

The core/invariant symptoms of IBFD-Self-Destructive Behavior Type have been summarized as follows (see EDM, 2007, pp.167-168):

i. High-risk behavior patterns resulting in injury, self-sabotaging, putting oneself down in public and setting oneself up for failure;
ii. Self-abusive behaviors, e.g., overuse of drugs or other harmful substances, overuse of alcohol, sexual promiscuity or unprotected sex, and shoplifting (not caused by kleptomania); and
iii. Deliberately and repeatedly hurting one's body: cutting oneself, picking or pulling skin and hair, burning skin, limb hitting and bruising, picking at wounds.

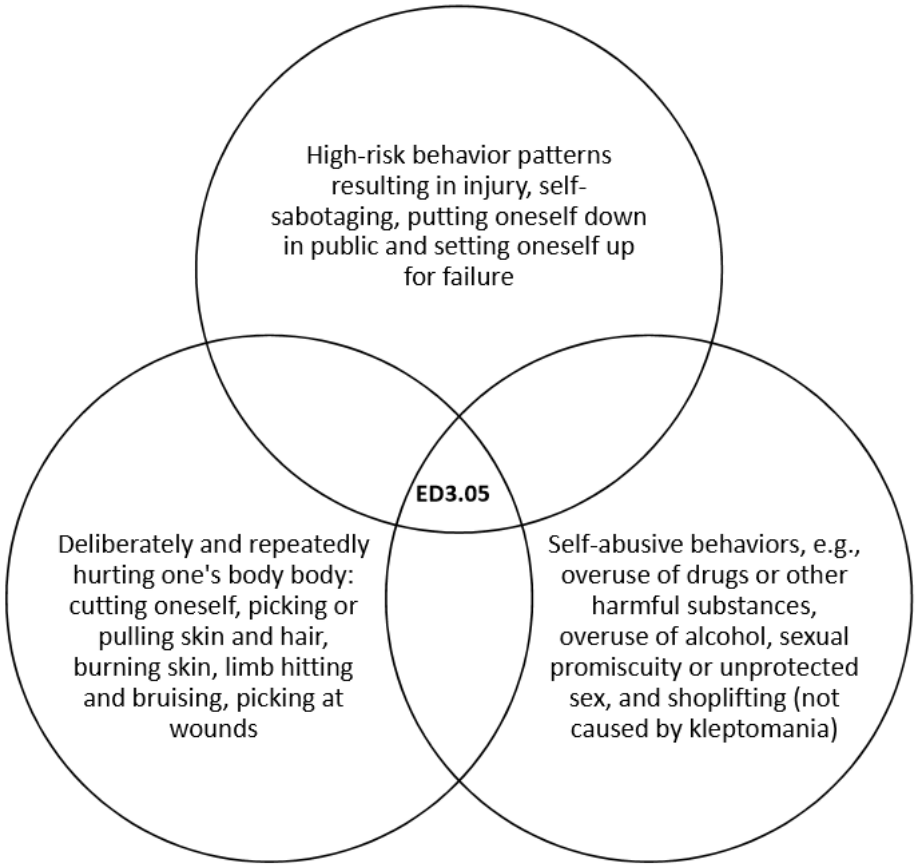

Figure 9: IBFD-Self-Destructive Behavior Type

ED3.06: Other types of Inappropriate Behavior or Feelings Disorders-Not Otherwise Listed.

ED3.06-IBFD-Not Otherwise Listed is the sixth and last specific type of ED3.00-Inappropriate Behavior or Feelings Disorders (IBFD). This last specific type includes any other possible specific types and/or subtypes of IBFD that have not been discovered or identified yet. It also includes those specific types and subtypes of IBFD that co-exist with other disabilities and/or disorders. It is this last specific type of IBFD that can be found in all the four quadrants of the CCAS framework.

6. IBFD within the CCAS Framework

The signs and symptoms of the six specific types of IBFD (from ED3.01 to ED3.06) are mainly overt, directly observable, more physically than verbally challenging acts (Watsonian behavioral acts). They include the following:

- In the first behavioral quadrant of cognitive stress in the CCAS framework, only ED3.01 (or proposed ED3.01b) IBFD-Aggressive Interactive Type (Verbal Aggression) can be found.
- In the second behavioral quadrant of cognitive anxiety in the CCAS framework, only ED3.01 (or proposed ED3.01b) IBFD-Aggressive Interactive Type (Verbal Aggression) can be found, too.
- In the third behavioral quadrant of affective conversion in the CCAS framework, only ED3.06 IBFD-Not Otherwise Listed is found.
- In the fourth behavioral quadrant of conative reaction in the CCAS framework are ED3.01 (or proposed ED3.01a) IBFD-Aggressive Interactive Type (Physical Aggression), ED3.02 IBFD-Disruptive Behavior Type, ED3.03 IBDF-Immaturity Type, ED3.04 IBFD-Impulse Control Type, and ED3.05 IBFD-Self-Destructive Behavior Type; and
- In all the four behavioral quadrants of the CCAS framework, only ED3.06 IBFD-Not Otherwise Listed can be found. This sixth specific type and/or its subtypes often co-exist with another disability or disorder such as childhood anxiety disorders with the subtypes (e.g., overanxious disorder or generalized anxiety disorder, avoidant disorder, phobic disorders, obsessive-compulsive disorder, panic disorder, anxiety associated with medical conditions or diseases, and substance-induced anxiety disorder (see Foxman, 2004, for detail).

Figure 10 summarizes the different specific types of IBFD classified under the four behavioral quadrants within the CCAS framework.

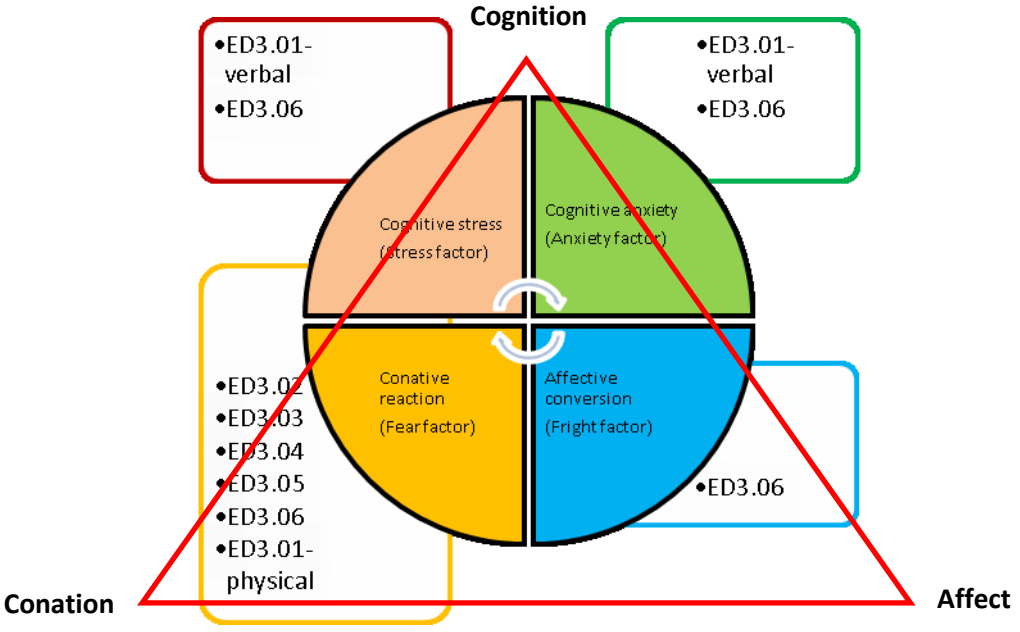

Figure 10: Classification of Specific Types of IBFD within the CCAS Framework

7. From Sensory Behavioral Stimulation to Activation

As an extension to our current understanding of behavior, there is more than just the different behavioral levels, types and acts. It is more than just the four behavioral potentials in terms of cognition, conation, affect and sensation that can be expressed in terms of behavioral quadrants, i.e., cognitive stress, cognitive anxiety, affective conversion and conative reaction. It includes the different categories aggressive or challenging behavior expressed in terms of directly or indirectly physically or verbally aggressive.

If we return to the beginning of this paper, we have already mentioned about the different levels of behavioral manifestation and their respective acts. In this section, we go deeper by exploring the conative reaction which begins with sensory stimulation (very much instinctual and/or involuntary) where the various sensory stimuli will result some form of reaction called responses. These are the Pavlovian behavioral acts of reaction to the stimuli that trigger some form of excitation. The excitation causes the organism to react by being aroused to act (activation) or perform purposefully (purposive activation) a certain appropriate task (purposive response or reaction) in responding to the stimulus of the onset within the context where it happens to attain the target goal (Skinner behavioral acts). This S-R behavioral process involves internalizing behavioral acts that occur in two internalized behavior phases: (1) stimulation → excitation; and (2) excitation→ activation; and this continues with externalizing behavioral acts that take place in two follow-up externalized behavior phases: (1) activation → meeting target behavioral goal (also known as the first or surface goal); and (2) an optional over-excitation → meeting the next target behavioral goal (also known as the second or deep goal). The difference between the first/surface goal and second/deep goal is that the former is just a goal to be achieved in order to complete a given task or to satisfy the S-R act, but the latter is fulfilled as a result of heightened interest or "*higher than average responsiveness of the nervous system to stimuli manifested by either psychomotor, sensual, emotional, imaginational, or intellectual excitability*" (Dabrowski, 1972, p.303). Dabrowski (1972) identified five overexcitabilities (OEs): psychomotor, sensual, emotional, imaginational, or intellectual. In this second externalized behavior phase, OEs "*are inborn intensities, heightened sensitivity and response to stimuli … cannot be unlearned but can be managed*" (Chia & Lim, 2017b, p.652). Individuals with OEs are often found to be gifted, talented or savant. Most of them are visual spatial learners and they can possess two or more OEs. For example, an individual with psychomotor OE possesses a heightened excitability of the

neuromuscular system which includes "*a capacity for being active and energetic*" (Piechowski, 1991, p.287). According to Piechowski (2006), psychomotor OE can also be characterized by an oversupply of energy as seen in psychomotor expression of emotional tension.

Figure 11 summarizes what has been discussed above in this section in the following conative model of internalizing and externalizing behaviors as a linear behavioral process in terms of stimulation → excitation → activation → surface target goal (first goal) → overexcitation → deep target goal (second goal) in pursuit of some specific interests.

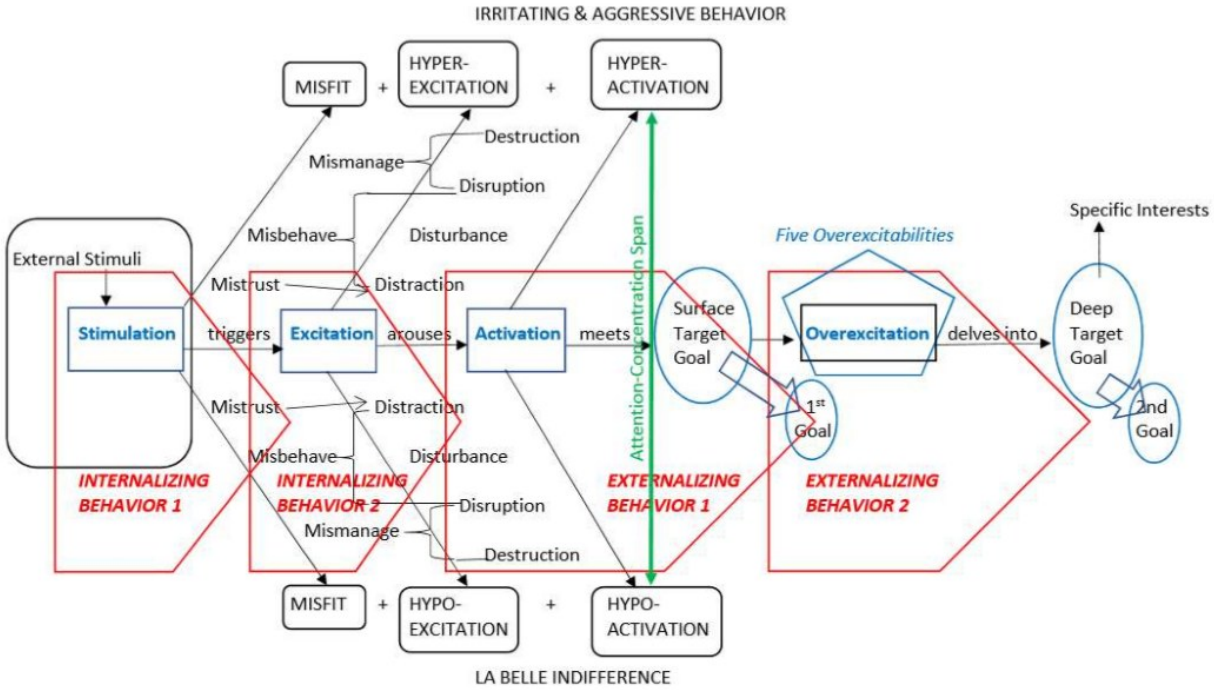

Figure 11: The Conative Model of Internalizing and Externalizing Behaviors

However, challenging internalizing behaviors can happen to anyone. They include poor self-esteem, depression, social withdrawal, anxiety, loneliness, decreased academic progress, and suicidal behaviors. Likewise, challenging externalizing behaviors, too, can happen to everyone. They include emotion dysregulation, impulsivity, antisocial behavior and aggression, and maladaptive behaviors directed toward the environment, causing impairment or interference in daily life functioning. In the follow-up section, we shall touch briefly on what happens when a behavior or feeling goes awry.

8. When Behavior or Feeling goes awry

From stimulation to excitation to activation, normal behavior or feeling can go awry and becomes aberrant, anomalous or abnormal. Between the stimulation and the excitation phases, there are four levels of stimulatory-excitatory internalizing behavior: mistrust → misbehavior → mismanagement → misfit. In other words, when an individual fails to gain trust from others or does not trust (or mistrust) others, he/she can misbehave or choose to misbehave, resulting in mismanagement (or misguidance) of what he/she is doing or his/her relationship with others. As a result, he/she will be perceived as a misfit by others. For example, in one popular fable about a shepherd boy who cries "wolf" three times, his friends hear his cries and at once rush to help him, only to find him rolling on the ground and laughing aloud, and it makes them look silly or stupid. Then one day, the wolf really comes and the boy shouts for help, but nobody comes to his aid. The shepherd boy has taken their trust for granted and now nobody trusts him anymore. Mistrust has already set in because of his misbehavior. The boy has mismanaged his relationship with others. Now, his friends may decide not to befriend him anymore after that embarrassing incident and he becomes a misfit among them.

The above story illustrates how an act (i.e., crying "wolf" to create a false alarm) is created by an external cause or agent (i.e., the mischievous shepherd boy with the intention to trick and make his friends look silly or stupid) and the effect(s) (i.e., his friends dismiss his cries when the wolf really appears) of this act (i.e., crying "wolf" to create a false alarm) on the environment or context involving others. According to Chia and Lim (2017a), they define "*the term effect as a state or condition of impression that inevitably follows an antecedent (as a cause or agent) and it is not an end in itself but a means to some kind of a socio-emotional behavioral reaction or response that may lead to some kind of a psychosocial complex*" (p.5).

Between the excitation and the activation phases, there are four levels of excitatory-activated externalizing behavior that can go both ways, i.e., vertically upward (hyper) or vertically downward (hypo): (1) hyper-excitation → hyper-activation, which can lead to hyperactivity and impulsivity as in attention-deficit/hyperactivity disorder (ADHD); and (2) hypo-excitation → hypo-activation, which can lead to la belle indifference as in mental fatigue syndrome. Between hyper-excitation and hyper-activation as well as between hypo-excitation and hypo-activation, there are four levels of excitatory-activated externalizing behavior: distraction → disturbance → disruption → destruction. Also, sandwiching between hyper-excitation/hyper-activation and hypo-excitation/hypo-activation is the attention-

concentration span. The midline between the two excitatory-activated externalizing behaviors is the normal attention/concentration. Whatever that is above or below the midline is poor attention/concentration. For an example, during a lesson in class, a student may find the lesson boring and look out of a window to watch a group of noisy boys playing in the school field. This is *distraction*. It contributes to inattention or wanting concentration. The noise in the school field causes *disturbance* to the student's attention in class during the lesson or the distracted student may choose to disturb his classmate sitting next to him by talking to him. If his voice is loud enough for the teacher to hear it and thus causes some *disruption* in the lesson, the teacher warns the student to keep quiet or leave the classroom. Supposedly, this student has been diagnosed with ED3.01-IBFD-Aggressive Interactive Type. He is not happy being told off by the teacher, bursts into anger, tears his textbook and walks out of the classroom. This is *destruction* in terms of (1) the missed learning opportunity during the lesson in class, and (ii) physically torn the textbook. In other words, the negative behavioral acts, in this illustration, have escalated through the four levels of hyper-excitatory-activated externalizing behavior, resulting in an unpleasant conative reaction of destroying his textbook and follows by leaving the classroom. Similarly, the same kind of negative behavioral acts can also happen with the hypo-excitatory-activated externalizing behavior, going through the same four levels, but results in developing an attitude of *la belle* indifference. In both ways, hyper- and hypo- excitatory-activated externalizing behaviors are considered inappropriate behaviors or behaviors that have gone awry.

9. Conclusion

Existing on a broad continuum of socio-emotional behavioral acts, reactions and responses, there is no clear demarcation to separate an inappropriate or challenging behavior from a serious emotional disturbance. Rather, the degree of severity for a behavioral problem can range from mild to moderate to severe, and may also extend to profound. An individual child can have a specific diagnosis of a behavioral disorder if his/her overt or directly observable behavioral acts occur frequently and are severe enough. A psycho-behavioral diagnostic assessment, evaluation and profiling (PBAEP) represents the best possible guess based on the child's manifestation of his/her behavioral acts that he/she has a specific problem (either Emotional Disorder or Other Health Impairment as listed in the EDM classification) and not just a problem that most, if not all, children might have from time to time.

The question frequently asked by parents and teachers is whether a PBAEP should be done on a child with suspected IBFD before a treatment is provided. In fact, we would advise that whether a treatment is needed should not depend on whether the PBAEP has been done. The behavioral problem does not vanish simply because it is not severe enough to warrant a PBAEP to be done or that it fails to meet the criteria for a diagnosis. What is most important is for the educational therapists, special educators and/or counselors to come up with an individualized treatment plan with specific written recommendations on how to help the child as a result of any evaluation, formal or informal, that has been made.

It is important to take note that different professionals see IBFDs in different ways. Their views as well as their treatment plans can be different because of their professional training, experience and philosophy about the origins of IBFDs. As a result, the initial step that parents and/or teachers should take is to be sure they agree with where the professional that they have consulted is coming from. It also means that they have to agree with the strategies that the professional will be using in the treatment. "*Otherwise, their cooperation in the treatment process may be compromised*" (Pacer Center, 2006, p.2). Finally, when seeking a treatment for a child with IBFD, parents and/or teachers may also want to consult another professional for a second opinion should they disagree with the approach suggested by the first professional.

Finally, by reframing our understanding of IBFD in terms of its socioemotional behavioral effects and their reactions and/or responses, and the psycho-behavioral problems, educational therapists, special educators and counselors are provided with some kind of an operational procedure involving the following proposed steps (Chia & Lim, 2017a, p.7) to deal with IBFD:

Step 1: Identification of the socio-emotional behavioral effect(s)

1.1 Know the antecedent (either a cause or an agent) that has resulted in some kind of a socioemotional reaction or response; and

1.2 Note down the reactions/responses to identify the suspected effect.

Step 2: Identification of the psycho-behavioral problem(s)

2.1 Interview the client to find out about his/her pattern of emotions, memories, perceptions, desires and wishes; and

2.2 Organize all the information given by the client around a common theme to identify the suspected psycho-behavioral problem(s).

Step 3: Decision on an appropriate psycho-behavioral strategy for treatment

3.1 Decide on a follow-up treatment plan of action with a suitable psycho-behavioral strategy (e.g., cognitive behavioral therapy, mindfulness-based cognitive therapy, solution-focused therapy, reality or choice therapy).

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