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Review

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Abstract: Several theories have been proposed on the subject of fundamental psychological human needs. A brief overview was given for some of these major theories. A more recent theory on core emotional needs, derived from the vantage point of schema therapy, was also proposed and comparisons were drawn with the other models, each with different psychological boundaries. Implications and what these psychological needs mean to parents were also discussed covering cultural norms that may inadvertently inflict harm on young children and adolescents.

Keywords: needs; schema therapy; attachment; core emotional needs; schemas

1. Comparison of Various Psychological Human Needs Model with Schema Therapy

In the wake of World War II, clinical psychology was focused on alleviating distress, especially as related to trauma (Wood & Johnson, 2016). No doubt, such attention was valuable and essential. However, over time, an overfocus on distress and dysfunction took place, and eventually became the main source of enquiry during treatment in clinical psychology. This persisted to the latter part of the twentieth century until the then American Psychological Association President Martin Seligman introduced positive psychology. Thousands of studies on positive psychology ensued (Wood & Johnson, 2016). While treatment on "what's wrong" in clinical psychology, and the use of one's "strengths" in positive psychology brought untold benefits, the question on basic human needs was not explored with the same tenacity. If the root cause of much human dysfunction, specifically mental illness, is associated with unmet psychological needs, then identifying these needs should be made a priority. The purpose of this paper is to be another voice in addressing basic human psychological needs and, in particular, to reveal a taxonomy of needs from schema therapy, a fast-growing evidenced-based psychotherapy approach for the treatment of personality disorders as well as many other aspects of mental illness.

The term "need" is loosely used today in our everyday language: children say they need an ice-cream cone, college students say they need a new car, and parents of young children always say they need more sleep. The word "need" must be distinguished from the word "want"; the latter is defined by Cambridge dictionary (Cambridge University Press, n.d.) as "to wish for a particular thing or plan or action". As opposed to physical needs, such as for food, water, and clothing, which are universally accepted and understood, psychological needs – having no material existence and being mental or psychological in nature (Deckers, 2018) – are not particularly understood and certainly not universally accepted. Baumeister and Leary (1995) put forward a set of criteria on what qualifies as a fundamental psychological need: they should produce effects readily under all adverse conditions, have affective qualities, direct cognitive processing, lead to ill-effect when thwarted, elicit goal oriented behavior, be universal, not be derivative of other motives, affect a broad variety of behaviors and have implications that go beyond immediate psychological functioning. Two decades later, Dwek put forward the criteria that a fundamental need should not be able to be reduced to other more specific needs, be universal from very early in life (from infancy) and must be associated with well-being and optimal development from very early on in life (Dwek, 2017).

2. An Overview of Major Theories on Human Psychological Needs

Several theories will be discussed below but this list is by no means exhaustive – only a brief overview will be given (for more details of each theory see Pittman, 2007; Dwek, 2017). We will begin with Freud's theory which explored the need for interpersonal contact, but his model was based on his presumption of a sex drive between parent and child (Freud, 1905). This has become a highly controversial subject and most practitioners and researchers do not subscribe to his model on innate sex drives within parent and child relationships in nuclear families.

Maslow in the 1940s proposed that human beings have two sets of needs. At the bottom of the hierarchy and going upwards, the needs were as follows: physiological (food and clothing), safety (job security), love and belonging (friendship), esteem, and self-actualization. Maslow at first stated that the needs lower down in the hierarchy must be satisfied before individuals can attend to higher needs (Maslow, 1943). However, he later clarified that a need would not have to be 100 percent satisfied before the next need would emerge (Maslow, 1987). The importance of Maslow's model lies in the fact that it provides the insight that physiological needs must first be generally satisfied before psychological ones.

In the 1950s, John Bowlby, known as the father of attachment theory, posited that infants have a need for attachment – defined as an enduring tie with a person who provides security (Bowlby, 1969). Bowlby stated that a child's attachment from a secure base would enable them to safely explore their environment and that they can return to this secure base if they perceive danger or threat (Bowlby, 1969). Lack of establishment of a secure base would disrupt the development of infants and lead to many dysfunctional behaviors during the adolescent and adult stages of life. Children who had experienced the secure base ended up with a more developed sense of being valued, had a greater sense of "felt security" and more optimistic views of social relationships; such children are labelled as being "securely attached". Conversely, when caregivers have not been consistently responsive to children's attempt for attachment, the development of defensive strategies categorized as avoidant, anxious and disorganized will be facilitated (Bowlby, 1969). It should be noted that Bowlby preferred to not link his attachment theory with a need, even though it seems obvious that secure attachment is a need since it satisfies all aforesaid criteria of a fundamental need (Pittman, 2007; Dwek 2017).

The Terror management theory (Pyszczynski et al., 1997, 2000) put forward the idea that self-preservation is the root need or master motive for all other needs. The root need to survive was said to be the overriding desired end state. Since the fear of death is universal, it is thereby assumed that the terror and anxiety associated with fear of death will influence people's thinking and behavior. This may also enable them to adopt the values of a certain culture in order to be part of an important group and protect their self-esteem. This theory does not begin at the infancy stage, but rather when a person is mature enough to conceptualize the terror of their mortality.

Another model called cognitive-experiential self-theory is heavily based on the theory of personality (Epstein, 1992, 1993). This model assumes four fundamental human needs: to maximize pleasure and minimize pain; to maintain a stable, coherent conceptual system for organizing experience; to maintain relatedness to others, and to maintain positive sense of self-esteem. There is no mention of this need starting from infancy, but rather a model that identifies the dual nature of information processing.

In 1995 Baumeister Leary (1995) proposed a model on the need to belong. More specifically, this belongingness hypothesis states that humans have a need to belong to a group and that they will maintain a minimum number of lasting, significant, and positive relationships. Unlike attachment theory, the need to belong is not focused on one person, such as a primary caregiver, but rather on "significant others" from early on in life.

Around this time Stevens and Fiske (1995) proposed that humans have developed five core social motives: to belong, to understand, to be effective, to find the world benevolent, and to maintain self-esteem. However, the primary need is to belong; the other needs are connected and stem from that. Little is mentioned about the responsibility of early caregivers and how they should function in order to effectively meet these needs.

Perhaps one of the most frequently researched and referred to model is known as the self-determination theory which identified three needs for optimal functioning and well-being: autonomy (the need to make choices freely by oneself), competence (the need to master a task) and relatedness (the need to connect with others emotionally) (Deci and Ryan, 2000). They also argued that these three needs are relevant across developmental periods (from childhood to adulthood), across cultures, and across personality differences (Ryan & Deci, 2017) and when these needs are satisfied, intrinsic motivation (defined as when an individual chooses to engage in an activity for its own sake, whether for interest, pleasure or satisfaction), will increase. Conversely, when these needs are thwarted, intrinsic motivation will erode (Ryan & Deci, 2017). Studies have shown that these three psychological needs are responsible for between 15% and 50% of our well-being, psychological health, performance at work, and overall success in life (Van den Broeck et al., 2016; Cerasoli et al., 2016).

Dwek (2017) proposed a model built on the aforementioned ones. Her model comprises three *basic* needs: acceptance, predictability, and competence and four *compound* needs: trust, control, self-esteem / status, and self-coherence. The need for trust comes from a combined need of acceptance and predictability; the need for control comes from competence and predictability; self-esteem from acceptance and competence. Finally, there is a need for self-coherence which itself has two sub-needs, namely, identity and meaning. This need is developed after successful integration of the other six needs. Dwek was clear that her model begins with infancy and carries into adulthood (Dwek, 2017).

3. Schema Therapy Model

Early Maladaptive Schemas (EMSs or "negative schemas") are defined as consisting of a specific pattern of thoughts, emotions, beliefs, bodily sensations, and neurobiological reactions (Lockwood & Perris, 2012; Louis et al., 2018; Young et al., 2003). In schema therapy, it is theorized that EMSs develop when core emotional needs are thwarted and not adequately met by primary caregivers early on in childhood (Louis & Louis, 2020; Young et al., 2003). Conversely, when they are met adequately, the development of Early Adaptive Schemas (EASs or "positive schemas"; Louis et al., 2018) is facilitated. Both EMSs and EASs have been identified empirically, with the validation of EMSs being far more extensive than EASs since it was identified over two decades earlier. Over the past 25 years, numerous studies with cross-cultural samples have demonstrated the association between EMSs and ill-being (Australia: Lee et al., 1999; China: Cui et al., 2011; Korea & Australia: Baranoff et al., 2006; Norway: Hoffart et al., 2005; Korea: Lee et al., 2015; Germany: Kriston et al., 2013; Denmark: Bach et al., 2017). More recently, a total of 14 EASs have been identified empirically (Louis et al., 2018) using samples from the United States, Singapore, Malaysia, Philippines, and India, and all 14 EASs were found to be associated with well-being.

EMSs and EASs can be grouped into higher level domains, with each domain consisting of a number of EMSs or EASs, thus revealing a hierarchical model. Young et al., (2003) proposed a five-factor model domain for EMSs labelled disconnection and rejection, impaired autonomy and performance, impaired limits, other-directedness, and overvigilance / inhibition. Many studies have assumed that this five-schema domain model had strong empirical support but that is not the case. Rather, several decades of empirical investigations of EMSs has resulted in a trend towards four higher order schema domains from studies such as Hoffart et al. (2005), and more recently from Bach et al. (2018) where large clinical samples were used. When broken down into four domains rather than five, the four categories of EMSs have been labelled as disconnection and rejection, impaired autonomy and performance, impaired limits, and excessive responsibility and standards. A parallel finding which also yielded four groups of EASs was uncovered from a study conducted by Louis et al., (2020a) using Eastern (Singapore; Kuala Lumpur, Malaysia) as well as Western (United States) samples, in which confirmatory and multigroup confirmatory factor analysis revealed four domains for the 14 EASs. Table 1 shows the grouping of these 14 EASs into the four categories of higher order schema domains. Since the development of each EAS is associated with a specific need being adequately met earlier on in life, each of the four larger domains comprising several EASs, by extension, represent a higher category of need that is believed to represent core emotional needs

(Young et al., 2003; Louis et al., 2020a). These core emotional needs have been labelled as: connection and acceptance, healthy autonomy and performance, reasonable limits, and healthy responsibility and standards. These four groups run in parallel with the four larger groups of 18 EMS (Hoffart et al., 2005; Bach et al., 2018). As theorized by Young et al., (2003) these needs should be met earlier on in life by caregivers, failing which strong, rigid EMSs and or weak EASs will develop. The EMSs that begin in childhood will carry into adolescent and adult life, causing harm. At the same time, the lack of EASs, or poorly developed EASs, will also cause harm. This model was conceptualized based on the responsibility of early caregivers to meet these needs in their children but does not explore other needs that may develop later on in life. In other words, the core emotional needs are universal; they essential from infancy and the responsibility to meet them lies with early caregivers. In comparing the needs model derived from the vantage point of schema therapy with the other aforesaid need models, we see mostly similarities and convergence, notwithstanding some differences.

Table 1. The Grouping of the 14 Positive Schemas in to Four Larger Domains Using Eastern and western Samples (Eastern, Singapore, n = 628, Kuala Lumpur, n = 229; Western, United States, n = 214)**.**

Connection & Acceptance	Healthy Autonomy & Performance	Reasonable Limits	Healthy Responsibility & Standards
Emotional Fulfilment			
Social Belonging			
Emotional Openness and Spontaneity			
Healthy Self-Interest/ Self-Care			
	Healthy Self-Reliance / Competence		
	Healthy Boundaries and Developed Self		
	Stable Attachment		
		Healthy Self-Control	
		Success	
			Realistic Expectations
			Empathic Consideration
			Self-Directedness
			Self-Compassion
			Basic Health /and Safety / Optimism

4. Need for Connection and Acceptance

Connection and acceptance in the schema therapy model fits well with Bowlby's attachment theory (1969) highlighting the need for a secure base and attachment, as well as the need to maintain relatedness to others from the cognitive-experiential self-theory model (Epstein, 1992). The need for connection and acceptance also aligns with the need to belong from Baumeister and Leary's belongingness hypothesis (1995), as well as the need to maintain relatedness to others from the five core social motives model developed by Stevens and Fiske (1995). It also runs parallel with Deci and Ryan's relatedness from self-determination theory (2000) and intersects well with Dwek's model of

acceptance, trust, and predictability (Dwek, 2017; Arntz et al., 2021). However, there is only marginal overlap with the terror management theory (Pyszczynski et al., 1997, 2000).

5. Need for Healthy Autonomy and Performance

Healthy autonomy and performance fits well with attachment theory in that upon feeling secure with the mother, a child will develop the confidence and autonomy to explore the world but return to the secure base upon perceiving danger or threat. It also fits well with the need for positive self-esteem in the cognitive-experiential self-theory model. There is a strong overlap with the need for positive sense of self-esteem as listed in the five core social motives model of Epstein (1992). There is also similarity with the need to be effective that is part of the five core social motives model developed by Stevens and Fiske (1995). Based on the terror management theory (Pyszczynski et al., 1997, 2000), self-esteem develops when a person adopts a group's value which is done to obtain protection against mortality – regardless of the motive, this is in accord with the core emotional need for healthy autonomy and performance.

There was no overlap with the belongingness hypothesis developed by Baumeister and Leary (1995) but a tremendous overlap with the autonomy construct that is part of the self-determination theory, as well as control, competence, and self-esteem in Dwek's model (Dwek, 2017; Arntz et al., 2021).

6. Need for Reasonable Limits

A case can be made that the need for reasonable limits from the schema therapy model converges with an aspect of the terror management theory, in that the latter induces awareness of mortality which will motivate individuals to identify with their cultural worldview and to live up to its values, thereby motivating them to adhere to healthy limits. The stable, coherent conceptual system for organizing experience from the cognitive-experiential self-theory taps into rationale and helps regulate behaviors, demonstrating similarities with reasonable limits. There are no parallel constructs for reasonable limits in the attachment theory, belongingness hypothesis or in the self-determination theory. However, the constructs of predictability, competence, and control from Dwek's model fit well with the need for reasonable limits (Arntz et al., 2021).

7. Need for Healthy Standards and Reciprocity

There is no comparable construct of healthy standards and reciprocity with attachment theory, the belongingness hypothesis or the cognitive-experiential self-theory. Since the terror management theory hypothesizes that a person's thinking and behavior may change if they adopt another group's culture, this *may* lead to standards that contribute to well-being. And certainly the need for healthy standards and reciprocity runs parallel with competence from the self-determination theory as well as from Dwek's model emphasizing competence, self-esteem, and control.

8. Universality of the Schema Therapy Needs Model

One important question to address is the universality of these core emotional needs from the schema therapy model. This model assumes that these core emotional needs are essential in childhood and that no new need develops thereafter, a divergence from Dwek's model (Dwek 2017) which theorizes that needs evolve and that new needs emerge and are built on other earlier ones. The findings of the four groupings of EASs, representing core emotional needs, were based on Eastern and Western samples, namely Singapore, Kuala Lumpur in Malaysia, and a Western sample from the East coast of the United States. Moreover, a study by Louis et al., (2022) has shown that all 14 EASs were replicated using a sample from the West coast of USA, as well as samples from South Africa, Nigeria, and India, bolstering support for the universality of EASs. Further studies are needed to confirm if the same groupings can be found in other samples worldwide.

9. What This Mean for Parents

The schema therapy needs model derived from Louis et al., (2020a) has important implications. One of them is to help parents know what these four core emotional needs are and that by meeting them adequately, or to a "good enough" degree (Louis et al., 2020b), they can prevent the development of active, rigid EMSs and at the same time foster the development of strong EASs, which carry into adolescence and adulthood. This model can also shed light on the specific unmet needs that give rise to the formation of strong EMSs and weak EASs which drive personality disorders (Young et al., 2003). If a deficit of certain core emotional needs (such as connection and acceptance) consistently appear to be linked with the formation of personality disorders, then steps can be taken to rectify this. Louis et al., (2021) found that when parents are consistent in spending time with their children (one-on-one and in groups), playing with them and facilitating healthy play, and when they ensure consistent family meal times, the need for connection and acceptance is met to a good enough degree (Louis et al., 2020). Another step which fosters greater connection and prevents all manner of dysfunction is when parents process and validate their children's emotions (Gottman, 1997). As for a different need, an example would be that when the core emotional need for reasonable limits is not met, especially if the need for connection and acceptance is also not met, then seeds are sown for the possible development of narcissistic personality disorders, since narcissism has roots in lack of limits and conditional love being shown by caregivers during early and late childhood and adolescents stages.

It is known that Eastern cultures are much less supportive of positive verbal expression than Western ones. This has been viewed as just a cultural norm. However, results of this schema therapy model suggest that the well-being of children correlates with warmth, holding and affection that is part of the core emotional need for connection and acceptance, along with the freedom of expression that comes with healthy autonomy. The high expectation for academic excellence held by many Asian parents (Chao, 1994) is not necessarily harmful and can be part of a supportive mother-child relationship. Yet the core emotional need for healthy standards and reciprocity calls for proper work-life balance and should help parents to urge their children to use their natural gifts and not yield to the pressure of society, especially the pressure to excel primarily in math and science (Louis et al., 2020). The use of corporal punishment as a motivator by many American, Asian, and African parents (Simons et al., 1994; Louis et al., 2022; Louis, 2022) is another prime example of a "cultural norm" that is believed to help draw out desired behavior in children. Yet many parents inadvertently abuse their children when physical punishment is administered. A study by Gershoff et al., (2010) involving mothers and children from six countries (China, India, Italy, Kenya, Philippines, and Thailand) revealed that a mother's use of corporal punishment, expressing disappointment, and yelling were significantly related to symptoms of child aggression. The core emotional need for reasonable limits calls for the use of healthy measures to discipline while maintaining connection with the child, including proper reconciliation after a disciplinary episode. Parents should also ensure that sufficient focus is given to all core emotional needs as imbalance takes place when one is given an overfocus while another is deficient. For example, when reasonable limits are introduced without sufficient connection and acceptance, the stage is set for the child to have strong EMSs and at best weak EASs. Cultural norms or values which contradict with meeting the core emotional needs may interfere with the healthy development in children and inadvertently inflict harm.

In closing, it is clear that the models mentioned earlier consist of constructs that overlap and converge, each carrying their own definitions and having their own set of psychological boundaries. Some models do not begin with infancy while others make infancy the starting point. Still, much work is needed to in order to find a clear, evidenced based model that clinicians will be able to use that will better identify and meet the psychological needs of human beings and thereby contribute to their well-being.

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