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## Transdiagnostic and Contextual Assessment of Addictive Behaviors

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### ABSTRACT

Psychological assessment is one of the first phases in all areas of clinical psychology and is present throughout the therapeutic process. Psychological professionals working in the field of addictive behaviors are no different from those working in other areas of clinical psychology, and functional analysis and the clinical interview are their main working tools. The transdiagnostic conceptualization of addictive phenomena is becoming increasingly popular and imperative, due to its practicality and predictive validity. As opposed to the biomedical model in mental health, there is an abundance of alternatives with a transdiagnostic approach (see the HiTOP model, RDoC). Regarding assessment, this translates into hundreds of constructs and questionnaires with acceptable psychometric properties, which is common in psychology. This article provides a critical review of the transdiagnostic approach and its applications in the assessment of addictive behaviors. It also presents a proposal for transdiagnostic assessment that may be useful in guiding psychological treatment planning and evaluating treatment outcomes. The article concludes with a summary of the main implications of adopting a transdiagnostic and contextual model.

### Evaluación Transdiagnóstica y Contextual de las Conductas Adictivas

### RESUMEN

La evaluación psicológica es una de las primeras fases en todas las áreas de la Psicología Clínica y se extiende a lo largo de todo el proceso terapéutico. Los profesionales de la Psicología que trabajan en el campo de las conductas adictivas no obran de forma distinta a otros que se ocupan de otras áreas de la Psicología Clínica, y el análisis funcional y la entrevista clínica son sus principales herramientas de trabajo. Cada vez es más popular e imperativa la conceptualización transdiagnóstica de los fenómenos adictivos, por su practicidad, y validez predictiva. Frente al modelo biomédico en salud mental, existe una gran abundancia de alternativas con un enfoque transdiagnóstico (véase el modelo HiTOP, RDoC). En cuanto a la evaluación, esto se traduce en cientos de constructos y cuestionarios con propiedades psicométricas aceptables, por su parte, algo común en Psicología. Este artículo realiza una revisión crítica del enfoque transdiagnóstico y sus aplicaciones a la evaluación de las conductas adictivas. También presenta una propuesta de evaluación transdiagnóstica que puede resultar de utilidad para guiar la planificación del tratamiento psicológico y evaluar sus resultados. Se concluye sintetizando las principales implicaciones que se derivan de la adopción de un modelo transdiagnóstico y contextual.

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Quoting the exact words of Dr. Marino Pérez, "*the biomedical model is not univocal but varied: infectious, traumatic, organic, systemic, syndromic, biopsychosocial, and psychopharmacological*" (Pérez-Álvarez, 2013). It can be said that, in all likelihood, of the different versions of the medical model, the biopsychosocial and psychopharmacological models are perhaps the most popular and most acclaimed by professionals in clinical psychology and medicine (and also by researchers) (Elío-Calvo, 2023). Not surprisingly, there are a number of factors that explain their predominance, since the adoption of a diagnostic paradigm (from the nosological point of view) provides a lingua franca to describe syndromes, facilitating communication with professionals and researchers. It also offers a broadly accepted model for assessing treatments through randomized clinical trials (RCTs), which are widely recognized. In fact, most research in clinical psychology on the efficacy of treatments is still based on classificatory systems, such as the Diagnostic and Statistical Manual of Mental Disorders [DSM] (American Psychiatric Association [APA], 2013) or the International Classification of Diseases [ICD] (World Health Organization [WHO], 2016), even among those that claim to adopt contextual therapies.

In clinical psychology, the adoption of a medical and biopsychosocial model is closely linked to psychiatric diagnosis and, therefore, the assessment will certainly be directed to the identification of symptoms or clinical disorders defined in the standard nosological systems. The reader will be well aware of the limitation of these systems for psychological practice, leading to a classificatory assessment, based on labels, and the assignment of patients to treatments that, for the most part, are aimed at repairing symptoms (including the supposedly "broken" cognitive mechanisms). It would seem then that there are specific techniques aimed at repairing specific aspects of human behavior.

As far as the assessment of addictive behaviors is concerned, the use of diagnostic systems is still very common in both the research and professional fields. The imprint of the biomedical model can also be seen in the use of screening questionnaires, whose items refer to particular symptoms of addictive disorders that, in turn, have been defined in nosological systems (e.g., craving, lack of control, etc.) (Miele et al., 2023; Nuamah et al., 2019).

Naturally, a common language system is needed to assign resources to specific services or to inform other professionals of a diagnostic judgment in the case of a referral, although, of course, with diagnostic systems we can learn little about the biography and maintaining factors (the consequences) of addictive behaviors.

Nosologically speaking, addiction-related problems are largely restricted to a relationship of universal symptoms (tolerance, loss of control, deterioration in personal relationships, etc.) that are manifested in most people with addictive disorders. From the biomedical model perspective, this would represent a phenotype of addiction. From this perspective, addiction problems are quantified in symptoms (e.g., 2, 3, 4, etc. out of 10), and the more symptoms, the greater the severity of the addictive disorder (e.g., mild, moderate, or severe according to DSM 5). Furthermore, a concern shared by clinicians and researchers is the significant overlap of symptoms across diagnostic categories, leading to what is commonly referred to as comorbidity—or more accurately, co-occurrence—the presence of multiple disorders within the same individual, which is the rule rather than the exception (Castillo-

Carniglia et al., 2019; Hasin & Walsh, 2021; Ormel et al., 2015; Sorkhou et al., 2024).

The aspects outlined so far are not new, and there have been profuse criticisms of diagnostic systems elsewhere (see Dalgleish et al., 2020; Deacon, 2013; Hengartner & Lehmann, 2017). Likewise, a number of dimensional alternatives have been proposed to guide addictive behaviors professionals in identifying change processes and identifying the most effective intervention procedures. Some examples are: the RDOC system (ultimately criticized for its biologicist stance due to an excessive focus on genetic and neurocognitive dimensions) (Cuthbert & Insel, 2013), the HiTOP model (Kotov et al., 2017), and the Operationalized Dynamic Diagnostic (OPD) system (Cierpka et al., 2006).

### The Era of Transdiagnostic Evaluation

The transdiagnostic approach arises from the dissatisfaction with the biomedical model and, consequently, with the categorical conceptualization of behavioral disorders (Colizzi et al., 2020; Cosci & Fava, 2016; Cunha et al., 2024). Strictly speaking, it represents an integration of the categorical and dimensional perspectives and offers a conceptualization that moves away from the specificity of disorders, seeking instead to describe the processes underlying different behavior disorders (clinical or otherwise), and problems that may not reach a diagnostic entity but cause dysfunctionality in the individual's life (Ródenas-Perea et al., 2025; Shukla & Pandey, 2021).

It can be said that the transdiagnostic approach focuses on commonality, emphasizing the variables or constructs that enable the explanation of both the onset and the maintenance of different behavioral disorders. This definition was proposed by Professor Sandín (2012), in the introduction to his monographic issue published in the *Revista de Psicopatología y Psicología Clínica* (*Journal of Psychopathology and Clinical Psychology*). Understood in this way, the transdiagnostic approach transcends the diagnostic limits of nosological systems by providing a comprehensive, dimensional explanation of the factors that explain the co-occurrence of different problems in the same individual.

This approach is credited with some benefits such as, for example, a better representation of the clinical and scientific reality of mental health problems. With respect to psychological assessment, it captures the complexity and co-occurrence of psychopathological disorders that are the norm rather than the exception in clinical practice (Dalgleish et al., 2020). It also aligns with scientific evidence supporting commonality in the risk factors involved in various compulsive behaviors other than substance use and gambling, including excessive pornography and cell phone use, compulsive shopping, binge eating, etc. Finally, in relation to psychological treatment, it offers clear guidance on the processes that can be addressed in a unified protocol, targeting addictive disorders and other co-occurring problems, resulting in a cost-effective approach that is presumably superior to traditional protocols based on the main diagnosis or symptoms of the primary clinical disorder.

The transdiagnostic conceptualization of addictive behaviors has gained popularity in the research and in the applied field of health psychology. In parallel, the role of context (social, public, and private) has been emphasized over biomedical models, as it is the

only way to thoroughly understand the phenomenon of addictive behaviors and design effective interventions sensitive to people's realities (Pérez-Álvarez, 2018). Indeed, contextual models that understand addictive behaviors as disorders of choice share the axiom that substance use and other non-substance addictive behaviors are influenced by the principles underlying any other type of behavior. Ultimately, adopting a transdiagnostic and contextual perspective on addictive behaviors means moving away from the 'moral failure' view or mechanistic and individualistic explanations.

### A Proposal for Transdiagnostic and Contextual Assessment of Addictive Behaviors

As the reader may anticipate, assessment through a transdiagnostic lens is pragmatic and has apparent validity in clinical psychology. However, due to the heterogeneity in the definition of what does or does not constitute a transdiagnostic factor or variable (Barch, 2020), there does not seem to be a clear consensus and, in the psychopathology research, there are at least several dozen transdiagnostic proposals, including: emotional lability, experiential avoidance, anger, neuroticism, impulsivity, etc. (de Aguiar & Bloc, 2024). Furthermore, in the specific field of addictions, there is a theoretical proposal for transdiagnostic variables in both substance-related and non-substance-related addictive behaviors (Kim & Hodgins, 2021).

From a transdiagnostic approach, the selection of the relevant variables to be assessed should be based on the empirical evidence supporting the involvement of a psychological process in the etiology and/or course of different behavioral disorders. Defining this is not a simple undertaking, however, since there are different conceptualizations of these variables (Sauer-Zavala et al., 2017), with up to 100 transdiagnostic variables being listed. Broadly, scientific definitions tend to fall into 'descriptive' and 'explanatory/causal' categories in the literature (Mansell et al., 2009). There are also definitions that focus excessively on the individual, overlooking the role of context and the factors that influence the cost-benefit relationship underlying engagement in addictive or non-addictive behaviors (Acuff et al., 2024). Descriptive definitions refer to psychological constructs involved in different behavioral disorders but not necessarily in etiology. Explanatory or causal definitions describe variables or constructs that are etiologically and functionally related to co-occurring behaviors and are therefore of high treatment relevance (Dalgleish et al., 2020).

The following text aims to present in a concise manner the available evidence on the main transdiagnostic variables involved in addictive behaviors and other co-occurring problems. It is important to emphasize that this text does not intend to expose all the existing transdiagnostic variables, given the large number of proposed variables and assessment instruments. Table 1 presents a proposal of transdiagnostic variables with descriptions and a selection of assessment instruments that could be useful in clinical practice. Please note that there are many others in English and Spanish that could be equally useful. The task of the health professional is to identify the relevant variable and instrument for the treatment process, with the aim of observing changes in the assessed constructs and evaluating effectiveness. The treatment approach is detailed in the fourth article of this monograph (Secades-Villa et al., 2025).

### Motivation for Change

Motivating individuals to seek treatment and commit to behavioral change is a challenge for health professionals. These professionals play a critical role in managing patient ambivalence and fostering commitment to change. For this purpose there are specific interventions such as motivational interviewing (MI) (Miller & Rollnick, 1991) and motivational enhancement therapy (MET) (Miller et al., 1999), which have been shown to be effective in circumventing resistance, improving treatment retention (Carroll et al., 2005; Kumar et al., 2021) and promoting substance reduction and abstinence (Blevins et al., 2018; Calomarde-Gómez et al., 2021; Steele et al., 2020).

Moving beyond the state versus trait dichotomy, motivation is considered a modifiable, multidimensional, dynamic, and fluctuating variable (Miller & Rollnick, 1991). Being an individual variable, motivation in people with addiction problems is inextricably linked to an understanding of the person's context and, especially, his or her learning history. For example, age and family (and one's own) history of illness are variables linked to motivation to discontinue addictive behavior (Ruan et al., 2024). Impulsivity and psychopathology are associated with lower motivation (Diclemente et al., 2008; Moshier et al., 2013; Sánchez-Hervás et al., 2002). Moreover, the function that addictive behavior serves in a person's life (e.g., managing negative mood, obtaining emotional anesthesia, or falling asleep—now known as experiential avoidance) will exert a very important influence on the decision to initiate treatment and reduce and/or cease the addictive behavior(s). For all these reasons, the assessment of motivation should be carried out in the clinical interview and taking into account other aspects that may influence the decision to initiate treatment and reduce and/or cease the addictive behavior.

### Life Values

Regardless of the theoretical and treatment model (humanistic, third generation, cognitive-behavioral, etc.), any professional working in the treatment of addiction-related problems will recognize that values work is a central aspect of abstinence and improved quality of life. This consideration adopts a person-centered approach to assessment and treatment. "Life values" have been described as a fundamental clinical process by Hayes et al. (2014). However, this approach is not new; earlier existential and humanistic frameworks were instrumental in recognizing what is unique and truly human (e.g., authenticity, meaning in life, individuation, and spirituality) (Sabucedo, 2021).

From an existential point of view, psychopathology (including addictive behaviors) may emerge as a result of the existential (universal) assumptions proposed by Irvin Yalom (1980): death, freedom, isolation, and meaninglessness. In this framework, addictive behaviors are positioned as actions aimed at avoiding the (existential) anxiety that might arise with the emptiness experienced in the face of the failure of a future project (e.g., relational, social, etc.). Thus, "being with the addictive object" would be a way of "being in the world", representing a rupture or lack of clarity of values. This is because the person prioritizes and highly values the addictive behavior over any other alternative reinforcer. This ontological understanding is very relevant because it broadens the

**Table 1**  
 Proposal of Transdiagnostic Variables to Substance and non-Substance Addictive Behaviors and Other Related Psychological Problems

Construct	Definition	Evaluation questionnaires
Motivation for change	Desire or willingness to change one or more behaviors, in order to improve wellbeing	<ul style="list-style-type: none"> <li>• URICA (Gómez-Peña et al., 2011).</li> <li>• Self-applied scale of 32 items that evaluates 4 stages of change (pre-contemplation, contemplation, action, and maintenance).</li> </ul>
Life values	Life areas that allow us to plan objectives and activities in alignment with what is valuable in an individual's life.	<ul style="list-style-type: none"> <li>• VLQ (Macías et al., 2023).</li> <li>• 20 items to assess the importance and consistency of a person's behavior in 10 main areas (family, partner, children, friends, work, education/training, leisure, spirituality, community life, self-care).</li> </ul>
Social support	Assessment of the magnitude of the social support network and the type of support (emotional, instrumental)	<ul style="list-style-type: none"> <li>• MOS-SSS (Revilla Ahumada et al., 2005).</li> <li>• 8 items assessing the social network and access to different sources of support (instrumental and emotional).</li> </ul>
Availability and efficacy of alternative reinforcers to addictive behaviors	Access to alternative or drug-incompatible reinforcers	<ul style="list-style-type: none"> <li>• OLAS-70 (González-Roz et al., 2025).</li> <li>• 70 items referring to 70 leisure activities; it evaluates the number of activities performed in the last month, as well as their frequency and enjoyment (associated with activities without using and under the effect of drugs).</li> </ul>
Sensitivity to reinforcement and punishment	Behavioral pattern of approach/avoidance to aversive stimuli (punishments) or pleasant ones (rewards).	<ul style="list-style-type: none"> <li>• SPSRQ (Aluja &amp; Blanch, 2011).</li> <li>• 20 items assessing sensitivity to reward and punishment.</li> </ul>
Difficulties in emotion regulation	Deficits in emotional regulation strategies and/or skills.	<ul style="list-style-type: none"> <li>• DERS-28 (Hervás &amp; Jódar, 2008).</li> <li>• 28 items assessing negative emotion regulation strategies.</li> <li>• DERS-P (Weiss et al., 2019).</li> <li>• 13 items assessing positive emotion regulation strategies.</li> </ul>
Positive and negative urgency	Impulsive behavior to emotional experiences of positive and negative valence.	<ul style="list-style-type: none"> <li>• UPPS-P (Cándido et al., 2012).</li> <li>• Self-applied 20-item scale assessing five traits (sensation seeking, positive urgency, negative urgency, lack of perseverance, and premeditation).</li> </ul>
Impulsive decision making	Preference and excessive valuation of an immediate reinforcer (e.g., drug) over a delayed and higher objective value.	<ul style="list-style-type: none"> <li>• Economic choice task (Kirby &amp; Makarovic, 1996).</li> <li>• 21 items that evaluate different choices between an amount of money in a specific time period and another amount of money of greater value in a delayed time span.</li> </ul>
Attention to the present	Mindfulness skills	<ul style="list-style-type: none"> <li>• MAAS (Soler et al., 2012).</li> <li>• Self-applied scale of 15 items measuring the individual's tendency to be attentive and aware of the experience of the present moment in daily life.</li> </ul>

Note. URICA = University of Rhode Island Change Assessment Scale; VLQ = Valued Living Questionnaire; MOS-SSS = Medical Outcomes Study-Social Support Survey; OLAS-70 = Oviedo Leisure Activities Scale; SPSRQ = Sensitivity to Punishment and Sensitivity to Reward Questionnaire; DERS-28 = Difficulties in Emotion Regulation Scale - 28 items; DERS-P = Difficulties in Positive Emotion Regulation Scale; UPPS-P = UPPS-P Impulsive Behavior Scale; MAAS = Mindful Attention Awareness Scale.

understanding of addictive behaviors beyond reductionism or theoretical assumptions based on the dysregulation of brain circuits. From this perspective, strategies are proposed that are aimed at improving the quality of life and fostering new ways of being and acting in alignment with the values that guide an individual's life; these strategies provide answers to the uncertainty and existentialist questions that human beings ask themselves (López-Ocampo et al., 2024). Most importantly, assessing values allows the individual to be considered as the main agent and ultimately responsible for their own treatment process.

### Social Support

At a conceptual level, social support can be considered a multidimensional construct (Sarason & Sarason, 2009), encompassing different types of support provision: *emotional* (listening and caring, as well as making the other person feel valued and loved), *instrumental* (providing tangible help and services), *informational* (guidance and advice) (Helgeson, 2003), and *evaluative* (information relevant to self-assessment) (Wachter et al., 2022).

Social support is one of the most relevant variables in the treatment of addictive behaviors, because it represents a protective factor against the development of addictive disorders (Cano et al., 2018; Jodis et al., 2023) and a predictor of quality of life (Cao & Liang, 2020; Langford et al., 1997). Moreover, when perceived

social support is sufficient and healthy, it is associated with lower severity of depressive symptomatology (Tan et al., 2021) and other psychological problems, including suicidal behavior (Rubio et al., 2020). However, social support can also act as a double-edged sword, becoming a risk factor for involvement in addictive behaviors and progression to an addictive disorder.

Social support can come from a variety of sources, such as family, partners, friends, and the school and work environment, with their roles varying depending on the context and the needs of the individual (Groh et al., 2007). In general, although the sources—and therefore the perception—of support tend to remain constant throughout the different stages of life, these can be affected as a result of certain life events (Sarason & Sarason, 2009). This is particularly so in the case of people with addiction problems; where attachment to networks associated with drug use and other addictive behaviors is very common, as is a decline in sources of healthy support due to the loss of trust and social consequences that come with problems related to addictive behaviors (Cougles et al., 2020).

In the treatment of addictive behaviors, social intervention focuses on the closest (family) and extended (friends or acquaintances) environment. One of the objectives in this area of intervention is to develop behaviors that facilitate the consolidation of a healthy support network and social participation, i.e., that enable the social integration of individuals. Therefore, the assessment of social support should identify the person's social

network, including the number of people who can be counted on to provide the different types of support (emotional, instrumental, and evaluative). In general, the perception of greater social support is associated with lower severity of addiction (Haverfield et al., 2019), as well as less impact of the negative effects of stigma (Chang et al., 2022) and perceived stress (Yang et al., 2021) in people in treatment for addictive behaviors.

### Availability and Effectiveness of Alternative Reinforcers of Addictive Behaviors

Access to alternative reinforcers to addictive behaviors is related to a lower likelihood of use and severity of addiction (Murphy et al., 2007), as well as to a higher likelihood of abstinence (MacKillop et al., 2010) and better treatment outcomes that address addictive behaviors and depression in combination (Daughters et al., 2008; Magidson et al., 2011). In contrast, limitations in access to alternative reinforcers to addictive behaviors are related to greater severity of addictive behaviors (Acuff et al., 2018; Correia et al., 2003) and greater likelihood of relapse (McKay, 2017).

One of the objectives of treatments for addictive behaviors is to increase the sources of natural reinforcement that are incompatible with—or at least alternative to—addictive behaviors. This aim is supported by research within the Behavioral Economics framework (Correia et al., 2010; González-Roz et al., 2020; MacKillop, 2016), in which addictive behaviors are conceptualized as a disorder of choice characterized by an overestimation of the reinforcing effects associated with substance use and the devaluation of the risks or negative consequences (usually delayed in time), resulting from substance use and other addictive behaviors (social, economic problems, etc.) (Bickel et al., 2011).

The results of these investigations suggest that the preference for consumption develops in a broader environmental context that includes access to alternative substance-free reinforcers and their associated restrictions. This highlights the relevance of assessing potentially reinforcing leisure activities for the individual, as well as the subjective efficacy of the reinforcer. Not all potentially reinforcing activities are effective for all individuals. Therefore, behavioral assessment of alternative and complementary reinforcers to addictive behaviors should consider not only a list of possible reinforcers but also their relationship (complementary or substitutive) with addictive behaviors.

### Sensitivity to Reinforcement and Punishment

Individuals with addiction problems tend to prefer an immediate reward (such as the use of alcohol or other drugs) and are often insensitive to the consequences of their behavior, such as, for example, deterioration in their physical and psychological health and loss of family and social relationships. Furthermore, scientific evidence indicates that drug use exacerbates the preference for immediate rewards of objective value—a phenomenon known as delay discounting (Amlung et al., 2017), which explains, in part, why people with addiction problems make irrational decisions to continue using substances. Therefore, the concepts of *sensitivity to reinforcement* and *punishment* should be considered in assessment processes given that a key goal of psychological treatments is to impact the valuation of the reinforcer (addictive object).

Reinforcement sensitivity theory (RST) (Gray, 1991) provides a comprehensive explanation of individual differences in sensitivity to reinforcement and punishment procedures, as well as their role in various psychopathological problems, such as depression (Katz et al., 2020), anxiety (Mendes et al., 2024), and attention deficit hyperactivity disorder (Gomez & Corr, 2010). It describes two neurobiological systems underlying human behaviors: the Behavioral Activation System (BAS), which is associated with approach behaviors toward rewards (and relief from punishment), and the Behavioral Inhibition System (BIS), which is related to behavioral inhibition in response to punishment. The theory postulates that individual differences in how people perceive rewards and punishments motivate learning and impulsive behaviors. It assumes independent functioning of these systems. For instance, individuals with high BAS sensitivity and low BIS sensitivity are prone to reward-seeking and approach behaviors (Sistad et al., 2019). In particular, the BIS system has been associated with negative affect and lower engagement in addictive behaviors (Jonker et al., 2014; Wardell et al., 2013), whereas people with low BAS and high BIS reactivity are more sensitive to punishment. Addictive behaviors, specifically, have been associated with BAS (Sistad et al., 2019).

### Emotion Regulation Difficulties

Emotional regulation can be conceptualized as a set of strategies and skills aimed at modifying an emotional experience that the person perceives as unpleasant, before, during, or after it occurs (Gross, 2002). It refers to attempts (at the cognitive or behavioral level) to modulate the expression of emotions, in order to produce an adaptive and flexible response to the demands posed by the context. Theoretical discussion of emotional regulation models and the differentiation between emotional regulation skills and strategies can be found in other reference texts (Levin & Rawana, 2022; Tull & Aldao, 2015).

The interest in addressing emotion regulation has been accompanied by a considerable increase in research on the construct. In the current scientific literature, efforts are directed at examining the relationship between the regulation of positive- and negative-valence emotions and addiction severity (Garke et al., 2021; Stellem et al., 2023; Weiss et al., 2022). Although there is little research to date, the results seem to suggest that the consideration of both types of regulation is relevant. This is consistent with the treatment approach of the Unified Protocol (UP: Barlow et al., 2011) and also with some of the main risk factors for relapse, such as interpersonal motivations (social events, interpersonal conflicts, good news in the family setting, the birth of a son, the graduation of a daughter). In particular, evidence supports the idea that behavioral, cognitive, cognitive-behavioral, and acceptance and commitment-based interventions can produce improvements in emotion regulation skills—even when emotion regulation skills are not necessarily one of the treatment objectives (Tull & Aldao, 2015). Collectively, this underscores the importance of assessing emotion regulation strategies and skills as a critical area of focus.

### Impulsivity

Impulsivity is one of the most complex constructs in psychology, both in terms of its conceptualization and its

treatment. In the scientific literature it has been presented as an umbrella term that encompasses different facets, aspects of temperament, and specific domains (Lynam & Miller, 2004). This practice aligns with what psychology refers to as the "jingle fallacy" (using a single construct to describe distinct concepts, such as, in this case, cognitive impulsivity, risk-taking, boredom susceptibility, etc.) and the "jangle fallacy" (using different terms to denote the same construct) (Whiteside & Lynam, 2001). The adoption of the term "impulsivity" in scientific contexts has arguably obscured the formulation of hypotheses regarding its modifiability, thereby hindering practical conclusions for treatment. For a more extensive review of the construct readers are referred to the text by Strickland and Johnson (2021).

There is consensus regarding the multidimensional nature of impulsivity (Berg et al., 2015). Moreover, some of its dimensions, far from being personality traits invariant over time, are highly influenced by the context and learning history of individuals, and may even fluctuate throughout the day (Wonderlich et al., 2022).

A more practical approach to translating research findings into the applied field of treatment involves considering specific variables that fall under the umbrella term "impulsivity" and that define impulsive behavior. Two empirically supported examples in relation to addiction severity are impulsive decision making (also known as delay discounting or DD) and trait impulsivity. Moreover, these variables are readily identifiable in clinical work with people in treatment for addictive behaviors.

A common way to assess impulsive decision making is by means of the DD task (for a review of the construct, the reader is referred to the first article of this monograph; Secades-Villa, 2025) that allows us to assess people's tendency to prefer immediate rewards of low objective value (e.g., drug use leading to euphoria and relief from withdrawal symptoms) to the detriment of other rewards of greater objective value, but which have a gradual impact and occurrence over time (e.g., effects derived from abstinence, physical exercise, adherence to the Mediterranean diet, etc.). People with addiction problems have higher rates of DD. For example, compared to non-drug users, those who use nicotine, alcohol, or cocaine, discount delayed reinforcers more steeply (Bickel et al., 1999; Coffey et al., 2003; Petry, 2001). Furthermore, different meta-analyses (Amlung et al., 2017; Kale et al., 2018; MacKillop et al., 2011) and reviews (Odum et al., 2020; Stojek et al., 2017; Story et al., 2016) link this construct to addiction severity and psychopathological disorders.

Evidence that this is an alterable variable is found in studies suggesting that DD can be modified through psychological interventions (García-Pérez et al., 2020; Weidberg et al., 2015). However, etiological studies relating DD to addictive behaviors with representative samples remain scarce; the study by Audrain-McGovern et al. (2009) constitutes one of the few studies that allow us to conclude the predictive role of DD in the initiation of tobacco use.

Trait impulsivity is associated with the facets of impulsivity that Whiteside and Lynam (2001) identified based on an exploratory methodology and subsequently redefined (Lynam et al., 2006). These authors identified five distinct facets related to impulsive behavior, including: urgency (positive and negative—the tendency to act impulsively when experiencing strong emotions), lack of premeditation (the tendency to not reflect or think about the

consequences of actions before performing them), and perseverance (difficulty persisting in goal-oriented behaviors to completion), and sensation seeking (the tendency to seek out and engage in novel and exciting actions or situations).

Among the facets mentioned above, urgency (positive and negative) seems to play a particularly relevant role in the treatment of addictive behaviors. Both negative and positive urgency are related to greater addiction severity (Hildebrandt et al., 2021; VanderVeen et al., 2016) and worse outcomes in the treatment of substance use disorders (Brunault et al., 2024; Hershberger et al., 2017). These facets are closely related to emotional regulation processes such that, in the face of positive or negative emotional experiences, people with high trait impulsivity in these two facets are more likely to act rashly. Assessing these facets during treatment is critical, as they have been linked to other psychological disorders (e.g., binge eating disorder, restrictive eating behaviors, self-injurious behaviors, generalized anxiety, etc.) (Berg et al., 2015; Bresin et al., 2013; Stojek et al., 2014). Addressing these dimensions could result in better outcomes for the treatment of addictive behaviors.

### Attention to the Present

The specialized literature offers different definitions of the concept of mindfulness, but there does not seem to be a consensus on it. One of the most widely accepted conceptualizations is the one proposed by Steven Hayes and collaborators (2014), describing it as a clinical process or response style focused on the present, characterized by full awareness and non-judgmental attention. Other texts speak of '*mindful attention*', '*awareness*', '*mindfulness*', '*focused attention*', and '*attention to present*'. In any case, attention and awareness do not seem to be synonymous, as not everything attended to becomes conscious (Blasco et al., 2008).

A deficit in present-focused attention—or inflexible attention—represents difficulty in sustaining attention and fragility in maintaining it. For example, people with attentional disorders have difficulties in directing (and sustaining) attention to goal-directed behaviors. Other experiential psychological problems such as anxiety or depression also trap sufferers so that worry (about the future or the past) absorbs so much attention that the current context is neglected (Fell et al., 2023; Rutherford et al., 2023). Similarly, in adults with traumatic events, levels of attention and mindfulness are significantly and negatively associated with post-traumatic stress symptoms, anxiety, and depression symptoms, even when controlling for the number of traumatic events (Bernstein et al., 2011). In terms of problems related to addictive behaviors, difficulties in attention to the present appear to be a risk factor for selectively attending to drug-related stimuli (Garland et al., 2011). This association could represent a comprehensive explanation for the risk of relapse after drug abstinence. Indeed, it has been observed that people with addiction problems have lower levels of attention to the present than control groups (Karyadi et al., 2014). Likewise, lower levels of this clinical process are related to craving (Barré et al., 2022; Garland et al., 2011). In contrast, higher levels are related to lower levels of stress in people with substance use disorder (Félix-Junior et al., 2022), greater severity of addiction and related problems (Arnaud et al., 2024). Finally, there are very few studies examining this variable as a predictor of addiction treatment

outcomes or as a mediator/moderator. This gap is significant for determining whether it constitutes an active ingredient necessary for abstinence. Witkiewitz and Bowen (2010) concluded in an RCT that a mindfulness-based intervention to prevent relapse attenuated the relationship between depressive symptoms and craving two months after the intervention, with this moderating effect predicting substance use four months after the intervention. All of this suggests that mindfulness training influences cognitive and behavioral responses, potentially extinguishing behaviors aimed at avoiding discomfort or craving. In a subsequent study by Vujanovic et al. (2020), higher levels of mindfulness at pretreatment predicted lower severity of PTSD at posttreatment but did not show a significant relationship with abstinence from the primary substance. Although the evidence to date is limited in terms of number of studies and methodological quality, the current state of research suggests that, at the very least, assessment of this clinical process is useful in guiding treatment planning.

### Conclusions

Current research indicates that traditional taxonomies, which are categorical, present a very reductionist view because addictive behaviors are not discrete phenomena. Co-occurrence—the presence of two or more psychological problems in the same individual—is the norm rather than the exception. Therefore, in the practice of psychology, assessment systems based on diagnostic categories present significant limitations for the understanding of problems related to addictive behaviors and treatment planning.

The transdiagnostic conceptualization, which is based on the identification of clinical processes underlying addictive behaviors and other psychological problems, has numerous advantages for the assessment of addictive behaviors, resulting in a process-based explanation useful for intervention planning. As mentioned above, numerous transdiagnostic frameworks exist, which may lead to clinician confusion or excessive focus on individual factors. This text aims to present a proposal for transdiagnostic variables that have garnered research interest and are applicable within professional practice due to their potential to be addressed through effective treatments and procedures. However, this is not a definitive proposal, much less a finished one. It is presumed to have a certain degree of clinical relevance and utility as it emphasizes the role of context, recognizing that individual variables are shaped by the public and private context of the individual and their learning history. One advantage of transdiagnostic variables lies in their ability to explain the onset and maintenance of both addictive behaviors and subclinical psychological issues that still cause significant distress.

In conclusion, the transdiagnostic movement brings to the forefront third-generation therapies and other similarly conceptualized interventions, such as the Barlow Unified Protocol (Barlow et al., 2011). Cognitive-behavioral therapies may also be considered transdiagnostic, but the debate about the conceptualization and utility of these therapies is beyond the scope of this text. In any case, a pending task for clinicians and researchers is to examine the change in the process variables that are assumed to be the object of the treatments. More applied research is needed in this area to guide future practice and move away from effectiveness assessments based solely on symptom reduction (e.g., abstinence, craving). This is the responsibility of both researchers and health professionals.

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### Conflict of Interest

The authors have no conflict of interest.

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