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Problem-solving skills as a path to happiness and well-being

Habilidades de solução de problemas como caminho para a felicidade e bem-estar

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Resumo: This article explores how Emotion-Centered Problem-Solving Therapy (EC-PST), grounded in Behavior Analysis, contributes to happiness and psychological well-being. Using the diathesis-stress model, it conceptualizes mental disorders as arising from ineffective repertoires when facing stressors. EC-PST integrates problem-solving with emotional regulation, psychoeducation, and the development of functional behaviors. It helps clients identify problems, regulate emotions, clarify values, and adopt more effective strategies in the face of adversity. From a contextual and pragmatic perspective, happiness is framed as the result of reinforcement histories that involve overcoming challenges and engaging in value-consistent behaviors. The paper argues, within the framework of Radical Behaviorism, that targeting emotional problems through behaviorally based interventions can significantly enhance subjective well-being and life fulfillment.

Keywords: EC-PST; problem-solving; emotional regulation; happiness; behavior analysis.

Abstract: Este artigo explora como a Terapia de Solução de Problemas Centrada na Emoção (EC-PST), fundamentada na Análise do Comportamento, contribui para a felicidade e o bem-estar psicológico. Utilizando o modelo de diátese-estresse, conceitua os transtornos mentais como decorrentes de repertórios ineficazes diante de estressores. A EC-PST integra a resolução de problemas com a regulação emocional, a psicoeducação e o desenvolvimento de comportamentos funcionais. Ela auxilia os clientes a identificar problemas, regular emoções, esclarecer valores e adotar estratégias mais eficazes diante da adversidade. Sob uma perspectiva contextual e pragmática, a felicidade é compreendida como resultado de histórias de reforçamento que envolvem superar desafios e engajar-se em comportamentos consistentes com os valores. O artigo argumenta, dentro do arcabouço do Behaviorismo Radical, que abordar problemas emocionais por meio de intervenções baseadas no comportamento pode aumentar significativamente o bem-estar subjetivo e a realização pessoal.

Palavras-chave: EC-PST; solução de problemas; regulação emocional; felicidade; análise do comportamento.

The pursuit of happiness and well-being has increasingly become a concern for the general population and mental health professionals (Ferreira Esma Lopes et al., 2021). Although these terms are widely used in everyday discourse and carry multiple meanings, both well-being and happiness can be primarily understood as deriving from the notion of what is considered good for a particular group of individuals (de Melo et al., 2015). According to Skinner (1971), what is defined as "good" corresponds to what members of a group find reinforcing, based on their genetic, ontogenetic, and cultural histories. In this sense, good things involve positive reinforcement for people's actions. Thus, states of well-being and happiness can be understood as labels given to the effects of contingencies that involve positive reinforcers as consequences. These contingencies, in turn, are subjective, as what is reinforcing for one person may not be for another.

The subjectivity of contingencies that may give rise to reports of well-being and happiness also requires explanation. To this end, we can draw on the concept of values as proposed by Acceptance and Commitment Therapy (ACT – Hayes, 2015). In ACT, values are understood as chosen life directions that reflect what is deeply meaningful to an individual. They are not specific goals or objectives to be attained, but rather qualities of action that can be pursued continuously (Dahl et al., 2009; Reilly et al., 2019). Based on this conceptualization, we can refine the definitions of well-being and happiness and suggest that, from a behavior-analytic perspective, they may be understood as terms used to describe the effects of contingencies that guide individuals toward their personal values and involve the occurrence of positive reinforcement for their behavioral patterns.

When we understand the concepts of well-being and happiness in terms of behavioral relations, we can adopt the notion that it is possible to devise strategies to help individuals more effectively achieve and maintain such states, as these states are products of how people behave in the world, and such behavior can be predicted and influenced (Kuroda, 2020). Based on this premise, we will discuss how certain behavioral strategies, particularly those proposed by Emotion-Centered Problem-Solving Therapy (EC-PST – A. M. Nezu & Nezu, 2019, 2021), can promote psychological well-being and happiness by teaching individuals to respond to daily adversities in more rational, planned, and emotionally regulated ways. It is important to emphasize that what is presented here is not a formula or universal prescription for achieving well-being and happiness, but rather a set of actions that, depending on the interaction between the individual and their environment, may guide them toward their personal values and increase the likelihood of contact with positive reinforcers, thereby producing access to states commonly referred to as well-being and happiness.

Although some procedures described within EC-PST, such as the externalization of emotions, the verbal articulation of difficulties, and the symbolic reorganization of one's experiences, may superficially resemble historical practices associated with the cathartic method of Breuer and Freud, their function within a behavioral framework is fundamentally different. From a functional-analytic perspective, these practices are not intended to "release" or "discharge" internal states, but to transform the functional relations between private and public stimuli, thereby reorganizing contingencies in ways that support more effective behavioral repertoires. In this respect, EC-PST remains aligned with a pragmatic, contextual, and non-mentalistic tradition of clinical intervention. The following section will describe the main aspects of the EC-PST model.

What is EC-PST?

The EC-PST is a therapeutic model situated within the broader field of cognitive-behavioral therapies, designed to systematically and adaptively develop skills in emotional regulation and problem-solving (A. M. Nezu & Nezu, 2021). Grounded in the diathesis-stress framework, this approach seeks to understand how biological, historical, and contextual factors interact to influence an individual's ability to cope with difficulties and relate to their problems more effectively (A. M. Nezu et al., 2013; C. M. Nezu et al., 2015). The model proposes systematic interventions involving the externalization of thoughts and emotions, the simplification of complex prob-

lems, and the use of rational strategies for decision-making and conflict resolution (D'Zurilla & Nezu, 2007). These interventions aim to assist individuals in managing everyday life problems, which are defined as situations that require adaptive responses to prevent or reduce negative consequences, especially when solutions are neither obvious nor readily accessible to the person in need of action. Such challenges may range from isolated events, like missing a bus or an important meeting, to persistent conditions, such as emotional disorders, chronic illnesses, or enduring abusive relationships.

Regardless of their duration, problems can arise in a variety of contexts (A. M. Nezu et al., 2013), including: (1) new experiences (e.g., starting a new job or entering college); (2) uncertainty regarding how to act (e.g., difficulties in paying off debts); (3) an inability to adequately predict the future (e.g., job instability); (4) conflict between personal values and life conditions or other people's values (e.g., relationships with incompatible goals); (5) deficits in performance or behavioral skills (e.g., academic struggles or communication problems); (6) lack of personal or social resources (e.g., emotional support or financial difficulties); and (7) intense emotional fluctuations (e.g., road rage or grief after the loss of a loved one). Real-life problems are thus idiosyncratic phenomena arising from the unique interaction between the individual and their environment (A. M. Nezu & Nezu, 2019; C. M. Nezu et al., 2015; Ugueto et al., 2014).

When individuals exhibit deficits in coping skills or adopt maladaptive patterns of thinking in response to everyday problems, they tend to maintain or intensify their emotional distress, perpetuating cycles of anxiety, depression, hopelessness, and demotivation (Bell & D'Zurilla, 2009). The absence of effective strategies for dealing with daily challenges is therefore a risk factor for the development and maintenance of psychopathology. EC-PST is based on the assumption that maladaptive behavior patterns in the face of daily problems often result from ineffective behavioral chains in which physiological changes or external contextual shifts serve as cues for avoidance, rumination, or impulsivity, rather than problem-solving responses (Meindl & Ivy, 2023; Palmer, 2009; Tourinho, 2006). These patterns may be maintained by immediately reinforcing consequences (such as emotional relief) but ultimately lead to the persistence or worsening of problems, distancing individuals from well-being and happiness. EC-PST aims to disrupt this cycle by training more functional (both public and private) behavioral skills that enhance problem-solving efficacy and thereby increase immediate and long-term access to natural and social positive reinforcers. Learning appropriate coping behaviors can thus redirect psychological functioning toward states of well-being and happiness (Tenhula et al., 2014).

Training more effective behavioral skills in EC-PST is based on two core components: (a) problem orientation, which includes beliefs, attitudes, and emotions related to one's capacity to cope with difficulties; and (b) problem-solving style, referring to how one actually deals with problems, whether in a rational, impulsive, or avoidant manner (A. M. Nezu & Nezu, 2021). Interventions that include training in positive problem orientation have been shown to be more effective than those focused solely on teaching logical problem-solving strategies (D'Zurilla & Nezu, 2007; A. M. Nezu & Nezu, 2019).

To achieve this, EC-PST offers four structured intervention mechanisms, organized into "Toolkits" that can be adapted to the client's needs: (1) Solution planning, which promotes a systematic and rational approach to challenges; (2) Reduction of cognitive overload, which aids in prioritizing demands and improving attentional focus; (3) Increasing motivation for action, which counteracts feelings of hopelessness and behavioral paralysis; and (4) Emotional regulation, which targets physiological arousal and dysfunctional emotional responses (A. M. Nezu et al., 2013; Ugueto et al., 2014).

Empirical research has demonstrated that structured application of EC-PST contributes to reductions in depressive and anxiety symptoms (Bell & D'Zurilla, 2009; Cuijpers et al., 2018), improvements in emotional regulation (A. M. Nezu et al., 2003; A. M. Nezu & Perri, 1989), and increased perceptions of self-efficacy in the face of adversity (Arean et al., 1993; Boggiano et al., 1993; Erdley et al., 2014). Although not all studies include subjective well-being or happiness as direct dependent variables, the clinical indicators examined, such as reduced distress, expanded functional repertoires, and enhanced sense of control, are strongly associ-

ated with perceived quality of life (Tenhula et al., 2014). Taken together, the available evidence indicates that EC-PST—by integrating rational coping strategies, emotional regulation procedures, and value-consistent action—constitutes a behaviorally grounded approach capable of promoting conditions associated with psychological well-being.

A clearer picture of how problem-solving interventions exert their therapeutic effects can be drawn from studies involving medically complex populations. Erdley et al. (2014) conducted a pilot randomized trial with older adults undergoing hemodialysis who exhibited clinically significant depressive symptoms. Thirty participants were randomly assigned to either a brief PST protocol or treatment as usual without PST. The PST intervention consisted of six structured sessions delivered during dialysis treatments and included training in positive problem orientation, systematic solution generation, and rational decision-making, components that directly overlap with EC-PST. Depressive symptoms decreased substantially more in the PST group than in the control condition. Participants also reported improved perceptions of coping ability and greater behavioral engagement in daily activities. These results are notable given that the environmental stressors (medical procedures, physical limitations) remained unchanged throughout the intervention, suggesting that shifts in orientation toward problems can meaningfully alter emotional states even when contextual contingencies cannot be modified.

A more comprehensive demonstration of the mechanisms involved comes from Project Genesis (Nezu et al., 2003), one of the most methodologically rigorous trials in this domain. In this randomized controlled study, 200 distressed adult cancer patients were allocated either to PST, supportive counseling, or usual care. The PST protocol included training in externalization of stressors, simplification of complex demands, emotional regulation strategies, and structured planning of valued actions. Outcomes were assessed across multiple domains, including emotional distress, worry, functional impairment, and perceived coping competence. Patients who received PST showed significantly greater reductions in distress and worry relative to both comparison conditions. Importantly, mediation analyses revealed that improvements in emotional regulation, shifts toward a more adaptive problem orientation, and increases in behavioral activation were the primary drivers of symptom reduction. These findings support the idea that EC-PST's emphasis on reorganizing functional relations among private events, environmental contingencies, and coping behaviors can produce measurable change even in high-intensity emotional contexts.

At the level of aggregated evidence, the meta-analysis by Cuijpers et al. (2018) synthesized results from more than a dozen randomized controlled trials examining PST for adult depression. Studies included a wide range of clinical populations, intervention formats (brief, standard, or adapted for medical settings), and methodological designs. Across trials, PST produced a moderate pooled effect size for reducing depressive symptoms compared to both inactive controls and alternative active treatments. Several included studies also measured secondary outcomes such as problem orientation, emotional regulation skills, and engagement in adaptive coping responses. Improvements in these behavioral processes consistently mediated reductions in depressive symptoms, reinforcing that the mechanisms emphasized in EC-PST, such as clarification of demands, systematic generation of solutions, and regulation of affective responses, are empirically reliable pathways to therapeutic change. Taken together, these findings provide a strong evidential basis for understanding EC-PST as a behaviorally grounded intervention capable of reorganizing coping repertoires to support well-being and psychological resilience.

EC-PST skills to foster happiness and well-being

The contribution of Emotion-Centered Problem-Solving Therapy (EC-PST) to the promotion of happiness and well-being becomes even clearer when its components are analyzed in light of the variables that comprise positive psychological functioning (Cuijpers et al., 2018; Malouff et al., 2007). Each mechanism within the approach

targets behavioral and emotional processes that, when modified, produce observable effects on perceived quality of life.

The relationship between these mechanisms and the desired outcomes in terms of well-being and happiness can be better understood by examining how each component of EC-PST acts on central variables of positive psychological functioning. For instance, the externalization of thoughts and emotions, one of the core strategies of EC-PST, allows individuals to gain functional distance from private content that would otherwise remain trapped in cycles of rumination, self-criticism, and hopelessness. By externalizing problems (through speech, writing, or visual mapping), clients are invited to observe their experiences from a new perspective, reducing the impact of dysfunctional verbal patterns and increasing their sense of agency. This practice, in addition to reducing rumination, is associated with greater perceived control, self-understanding, and subjective well-being (A. M. Nezu et al., 2013).

Regarding the externalization of emotions, it is important to differentiate EC-PST from classical cathartic models, as this is essential for clarifying the therapeutic function of its procedures. Within a behavioral framework, the clinical utility of emotional verbalization/externalization lies not in providing emotional relief or facilitating the expression of hypothetical psychic energy, but in altering the contingencies that maintain ineffective coping patterns. When incorporated into EC-PST, emotional expression functions as a tool for discriminating private events, reducing aversive control, increasing behavioral variability, and reorganizing functional response chains. This distinction is central for preserving conceptual coherence with Radical Behaviorism and for situating EC-PST firmly within a functional, contextually grounded approach to psychotherapy.

After externalization, there is the problem simplification that aims to reduce cognitive overload. Many everyday problems involve multiple, simultaneous, and poorly defined variables, which can lead to feelings of helplessness and behavioral paralysis. EC-PST teaches clients to break problems down into smaller, more manageable parts, facilitating decision-making and enhancing clarity regarding actionable steps. This simplification leads to improved mood, reduced perceived stress, and increased motivation, fostering the emergence of positive emotions linked to a sense of progress and mastery (C. M. Nezu et al., 2015).

Rational solution planning contributes to the development of purposeful, action-oriented repertoires. By structuring plans with specific, measurable goals aligned with personal values, clients begin to experience progress toward meaningful objectives, increasing the frequency of natural reinforcers (such as recognition, success, and a sense of competence). Such progression is one of the main predictors of life satisfaction, especially when combined with a sense of self-direction (A. M. Nezu et al., 2004).

Emotional regulation, another pillar of the approach, assists in modulating intense physiological states (such as anxiety, anger, or hopelessness) that often impair behavioral effectiveness. Understanding and managing such states reduces the likelihood of impulsive or avoidant responses and enables individuals to remain engaged in functional solutions even under stress. The literature indicates that the ability to regulate emotions is positively associated with emotional well-being, resilience, and a higher frequency of positive affective experiences (Gross, 2002, 2015; Schore, 2015).

Finally, the enhancement of motivation for action, addressed in EC-PST through the recognition of small victories, reconnection with values, and overcoming paralysis, strengthens the sense of direction and purpose. This component counters the inaction cycle typical of depressive or demotivated states, promoting a more active, engaged, and rewarding lifestyle. Functionally, this means reallocating behavior toward contexts richer in positive reinforcers, thereby enhancing well-being in a sustained manner (Boggiano et al., 1993).

Thus, by intervening across multiple dimensions of human experience, EC-PST promotes not only the resolution of immediate problems but also a sustained transformation in the conditions that support experienced happiness and subjective well-being. By developing coping skills grounded in problem orientation, rational planning, emotional regulation, and action motivation, individuals expand their capacity to solve everyday challenges and are more likely to achieve meaningful goals,

which inevitably results in increased perceived well-being (D'Zurilla & Nezu, 1999; Tenhula et al., 2014). From a functional standpoint, EC-PST teaches clients to allocate more time and energy to behaviors that produce reinforcement contingent on problem-solving, rather than maintaining patterns of rumination, avoidance, procrastination, or impulsivity—patterns often maintained by short-term negative reinforcement but associated with long-term costs. This reconfiguration of behavioral allocation (cf. Baum & Rachlin, 1969) is central to what we refer to as therapeutic change, which may be a necessary path to accessing and maintaining what we call well-being and happiness.

From this perspective, the notions of happiness and well-being adopted within EC-PST are interpreted as products of effective engagement with reinforcing environmental contingencies. These notions can also be enriched by contemporary authors who conceptualize happiness not as a static state but as a situated, continuous, and contextualized practice. For example, Dolan (2014) defines happiness as the dynamic balance between momentary pleasure and a sense of purpose (or values, as in ACT). This distinction is particularly useful in clinical psychology, as many of the reinforcing contingencies accessed through EC-PST do not translate immediately into pleasure or relief, but are instead linked to behaviors that support a life more consistent with personal values, thus promoting a form of happiness oriented by those values.

In this sense, EC-PST provides a structured framework through which clients can learn to engage more effectively with their difficulties, in line with evidence showing that problem-solving interventions enhance coping competence and perceived control. Rather than suppressing suffering, the approach teaches individuals to adopt a more adaptive stance toward it, strengthening their competence to live, choose, and act in spite of the inevitable pain that is part of human experience. By conceiving happiness not as an abstract internal state, but as the functional product of effective interactions with the environment, EC-PST includes procedures that target not only the modification of external contingencies but also the functional reorganization of clients' private repertoires, promoting a more effective allocation of actions across time and space toward real solutions to real problems (D'Zurilla et al., 2004; D'Zurilla & Nezu, 2007). Emotional regulation, action planning, the reduction of cognitive overload, and motivation to act constitute an integrated set of skills that can transform how individuals relate to their daily challenges.

From this standpoint, happiness and well-being are not understood as the absence of suffering or the accumulation of pleasurable experiences, but as the result of a behavioral repertoire that allows for creative and purposeful responses to life's adversities. It is, therefore, an active and continuous practice of choosing actions aligned with personal values and supported by effective coping skills—something that can be systematically taught, trained, and reinforced throughout the therapeutic process.

Conclusion

The evidence and conceptual analysis presented throughout this article indicate that EC-PST represents a promising approach for promoting happiness and psychological well-being. We adopt a functional and contextual conception of happiness and well-being, understood not as an idealized or purely emotional subjective state, but as the outcome of an effective behavioral repertoire in response to life's demands—one that fosters engagement in activities with personal and social value. By integrating emotional and cognitive aspects of the problem-solving process, EC-PST enables the construction of meanings that are more coherent with an individual's life history and personal goals, thereby contributing to a more integrated and fulfilling subjective experience. In this sense, the approach aligns with the notion of happiness as a product of the articulation between an effective behavioral repertoire and a supportive environmental context, without resorting to normative idealizations about what a happy life should be.

Despite the theoretical and clinical potential of EC-PST in promoting well-being and happiness, studies that directly examine the effects of this approach on these specific outcomes remain scarce. Most research on EC-PST has focused on its efficacy in treating psychological disorders such as depression, anxiety, and chronic emotional distress

(D'Zurilla & Nezu, 1982; A. M. Nezu et al., 2013; A. M. Nezu & Nezu, 2021), with less emphasis on positive aspects of human functioning, such as life satisfaction, positive emotions, engagement, or personal fulfillment.

This gap highlights the need for studies that systematically evaluate, using rigorous methodological designs, the impact of EC-PST on indicators of subjective well-being. Assessments incorporating multimodal measures (self-reports, behavioral indicators, physiological data, and third-party evaluations) could contribute to a more comprehensive understanding of EC-PST's effects on experienced happiness and a life with purpose.

Moreover, it is crucial to consider the need for cultural and contextual adaptations of the approach for diverse populations. Research involving different age groups, socioeconomic levels, and educational backgrounds could help identify barriers and facilitators in the implementation of EC-PST, as well as improve its accessibility and clinical effectiveness in real-world settings. Cost-benefit analyses, client acceptability, and therapist training are also relevant considerations for an applied research agenda.

Thus, while EC-PST shows strong potential as a behavioral technology for promoting human well-being, we acknowledge that the consolidation of this field of practice depends on future investigations that empirically test and expand this hypothesis. A science of behavior committed to improving quality of life must focus not only on the reduction of suffering but also on strengthening the conditions that support a meaningful, reinforcing, and autonomous life.

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