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RESEARCH PAPER

EMOTION REGULATION IN PSYCHODYNAMIC AND COGNITIVE-BEHAVIOURAL THERAPY: AN INTEGRATIVE PERSPECTIVE

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Abstract

Objective: Psychotherapy fragmentation constitutes a significant barrier to progress. In the present article, we argue that emotion regulation processes operate across psychotherapy approaches, serving as an overarching meta-factor of therapeutic change.

Method: Two major therapeutic approaches – psychodynamic and cognitive-behavioural – were examined through the lens of emotion regulation theory. In particular, key constructs within each approach were analyzed in terms of relevant emotion regulation processes.

Results: Emotion regulation processes are an overarching meta-factor relevant to a wide range of therapeutic constructs (e.g., defence mechanisms, internal working models, coping strategies, ruptures/reparations of alliance). Different clinical traditions emphasize different aspects of emotion regulation, mainly in terms of implicit vs explicit emotion regulation processes.

Conclusions: An integrative emotion regulation perspective contributes to our understanding of the core change mechanisms of psychotherapy, with significant implications both for research and clinical practice.

Key words: emotion regulation, intrapersonal, interpersonal, psychodynamic therapy, cognitive-behavioural therapy

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One of the central questions in psychotherapy research is how psychotherapy works (Hofmann & Hayes, 2019; Wampold & Imel, 2015). One barrier to addressing this question is psychotherapy fragmentation, which refers to the tendency for adherents of differing theoretical approaches to operate within competing communities that rarely interact (Salvatore, 2011). This has led to similar theoretical concepts, procedures, and phenomena sometimes being described using different terms (polynomy), while at other times, the same terms are used to describe different and only partially overlapping phenomena (polysemy; for further discussion of this topic, see Block [1996]).

To move towards a more unified view of psychotherapy, researchers have attempted to identify 'common factors' shared by different approaches (McAleavey & Castonguay, 2015; Wampold & Imel, 2015). However, a satisfactory consensus has not been reached as to which constructs should be considered common factors that operate across the various treatment traditions (Cuijpers et al., 2019). Indeed, it is not yet clear whether it is possible to identify well-defined processes that are common across different theoretical perspectives.

In the present article, we argue that emotion regulation (ER) processes operates across psychotherapy approaches, serving as an overarching meta-factor of therapeutic change. Notably, although ER has often been cited among common factors in psychotherapy research (Goldfried, 2013; Jørgensen, 2004; Lambert & Barley, 2001; Orlinsky et al., 2004; Tschacher et al., 2014), ER processes have not been well elaborated or integrated with the key constructs that characterise different theoretical traditions. Such integration is essential for research and practice (Mennin et al., 2013), considering that most – if not all – practitioners have a 'home base' in which they feel comfortable and secure and are most likely to expand their horizons if they are provided with a re-reading of their model that creates a connection to other theoretical models via well-articulated bridging concepts.

Emotion Regulation

ER can be defined as an attempt to alter the magnitude

and/or quality of emotions (Gross, 1998b) either prior to or following an emotional response (Gross, 2002). ER can be *intrapersonal*, occurring at the level of a single individual (Gross, 2013), or *interpersonal*, occurring at the level of a dyad (or larger group), in terms of both real external interactions and internal representations of external interactions (Jacobs & Gross, 2014). Zaki and Williams (2013) proposed an additional distinction within interpersonal ER processes, classifying them as either *intrinsic* or *extrinsic* based on the internal or external location of the 'target' of a regulation attempt. Thus, intrinsic ER refers to an individual's actions in initiating social contact to regulate one's own experience, while extrinsic ER refers to behaviours adopted to regulate others' emotional experiences.

A further differentiation of ER revolves around the degree of awareness of the emotion regulation goal and may result in *implicit* ER (i.e., when a conscious intention to modify emotional responding is not involved) or *explicit* ER (i.e., when a conscious desire to change emotions is involved; Gyurak et al., 2011). Moreover, change processes for both poles of awareness of the goal can range from more *automatic* (i.e., when non-conscious operations of change emotions are involved) to more *controlled* (i.e., when effortful attempts to change the initial emotional response are involved; Braunstein et al., 2017).

Table 1 provides somewhat fanciful examples drawn from Shakespeare's *Romeo and Juliette* to illustrate these differing types of emotion regulation. Critically, in the interests of clarity and synthesis, boundaries between ER types are presented as discrete processes, although all these dynamics interact and mutually influence each other simultaneously.

Emotion Regulation in Psychotherapy

Interpersonal ER, especially in its extrinsic form, may best represent psychotherapy practice in which the therapist attempts to alter the emotional responses of patients. Indeed, the role of ER dysfunction in psychopathology is so central that it represents one of the criteria for the very definition of "mental disorder": "a syndrome characterised by clinically significant disturbance in an individual's cognition, emotion regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental underling mental functioning" (American Psychiatric Association [APA], 2013, p. 20).

As a whole, symptom reduction post-therapy has been shown to be associated with improvements in ER adaptive strategies (Aldao et al., 2014). Although some new therapeutic approaches focused on ER have been proposed in the past decade (e.g., emotion regulation therapy, ERT; Mennin & Fresco, 2010), we think that it is crucial to clarify ER's role in the therapeutic process by considering whether and to what extent ER processes underlie different psychotherapeutic approaches widely applied all over the world.

In the following sections, we focus on psychodynamic therapy (PDT) and cognitive-behavioural therapy (CBT), two major psychotherapeutic approaches (Leichsenring et al., 2006; Pilecki et al., 2015) used in the treatment of psychological/psychiatric disorders. For each approach, we outline the role that ER plays in its fundamental constructs implicated in the patient's change trajectory during treatment. Although PDT and CBT are each heterogeneous families of therapeutic approaches, the presence of shared epistemological

Table 1. *ER processes: Systematic classification and related examples*

Intrapersonal		Implicit	Automatic	*Romeo suppresses his fear of death (extinction).*
			Controlled	*Romeo tries to label his indistinct emotion as rage against Mercutio (affective labelling).*
		Explicit	Automatic	*Romeo regulates his passion for Juliet during the masked ball led by the knowledge of their social condition, implying that publicly manifesting it would represent a threat for them.*
			Controlled	*Romeo looks at the reason for his sadness from another perspective (reappraisal).*
Interpersonal	Intrinsic	Implicit	Automatic	*Romeo regulates his own indistinct internal distress by seeking affective contact with Juliet.*
			Controlled	*Romeo regulates his own indistinct internal distress by thinking of Juliet during his exile in Mantua.*
		Explicit	Automatic	*Romeo regulates his own conscious fear of losing Juliet by seeking contact with her.*
			Controlled	*Romeo regulates his own conscious fear of losing Juliet by thinking of her promise of love.*
	Extrinsic	Implicit	Automatic	*Juliet regulates Romeo's indistinct internal distress by her affective attitude toward him.*
			Controlled	*Juliet regulates Romeo's indistinct internal distress by her reassuring words.*
		Explicit	Automatic	*Juliet regulates Romeo's explicit fear of losing her by generally speaking of her love for him.*
			Controlled	*Juliet regulates Romeo's explicit fear of losing her by verbally assuring him that he will never lose her.*

roots within these two macro-approaches warrants a general comparison between the two (Charis & Panayiotou, 2021; Fernández-Álvarez et al., 2016; Pilecki et al., 2015).

A general view of the correspondences delineated in the intra- and interpersonal processes of ER, its explicit/implicit and automatic/controlled components, and the core constructs of PDT and CBT are summarised in **table 2**. From an emotion regulation perspective, change in psychotherapy is mediated by the acquisition of ER processes, both explicitly or implicitly, and initiated at the clinical interpersonal level by targeting changes in ER processes at the intrapersonal level within and outside of the therapeutic setting.

structural model, Freud (1923) delineates the Ego as the regulator of competing psychic processes and therefore devoted to managing inner drives and emotions and playing the role of psychic regulator. The Ego's main function is conceived to enact secondary (i.e., conscious) processes that, in turn, regulate and filter rampant primary processes (i.e., unconscious; Freud, 1923). According to Freud (1933),

> One might compare the relation of the Ego to the Id with that between a rider and his horse. The horse provides the locomotor energy, and the rider has the prerogative of determining the goal and of guiding the movements of his powerful mount towards it. (p. 108)

Freud (1933) also addresses the dysfunctional consequences of the Ego failing to regulate the Id:

Table 2. *Synthetic view of ER processes in PDT and CBT*

	Psychodynamic therapy (PDT)	**Emotion regulation processes**	**Cognitive-behavioural therapy (CBT)**	**Emotion regulation processes**
Intrapersonal level	Defence mechanisms (e.g., Cramer, 2008; Freud, 1926)	*Implicit; both automatic* (immature defences) *and controlled* (mature defences)	Coping strategies (Lazarus & Folkman, 1984)	*Explicit; controlled*
	Attachment-related internal working models (Bowlby, 1969)	*Implicit; automatic*		
Interpersonal level	Therapeutic containment (Bion, 1962) and holding environment (Winnicott, 1949)	*Extrinsic; implicit; automatic*	ABC model (Dryden, 2012; Ellis & Dryden, 2007)	*Extrinsic; explicit; controlle*
	Corrective emotional experience (Alexander & French, 1946)	*Intrinsic, implicit; automatic*	Avoidance-exposure therapeutic approach (Borkovec et al., 2004)	*Extrinsic; explicit; controlled*
	Attachment-related earned security (Roisman et al., 2002)	*Extrinsic; implicit; automatic*	Mindfulness based cognitive therapy (Hayes et al., 1999; Segal et al., 2002)	*Extrinsic; explicit; controlled*
	Therapeutic alliance (Sterba, 1934)	*Extrinsic, with both implicit and explicit components, as well as automatic and controlled ones*	Therapeutic alliance (Castonguay, 2010)	*Extrinsic, with both implicit and explicit components, as well as automatic and controlled ones*

Emotion Regulation in Psychodynamic Therapy (PDT)

As a macro-approach, PDT serves as an umbrella for a variety of theoretical models, such as classical psychoanalysis (Freud, 1896), ego psychology (A. Freud, 1936; Hartmann, 1939), object relations theory (Klein, 1946, 1963; Winnicott, 1953), attachment theory (Bowlby, 1988), and relational psychoanalysis (Mitchell & Aron, 1999). PDT focuses on changing problematic thoughts, feelings, and behaviours by pursuing the emergence of unconscious past content in patients and connecting it to current conscious experiences.

Intrapersonal ER in PDT

The idea of intrapersonal mechanisms regulating drives and emotions, as a progenitor of the contemporary conception of ER, is rooted in the classical psychoanalytic tradition (Gross, 1999). In his

> But all too often in the relations between the Ego and the Id, we find a picture of the less ideal situation in which the rider is obliged to guide his horse in the direction in which it itself wants to go. (p. 108)

Among the Ego's main functions are defence mechanisms, mental (usually unconscious) operations that regulate the Id's internal drives and impulses, and whose failure results in anxiety (Freud, 1894, 1896; A. Freud, 1936), a catch-all term for negative emotions from Freud's perspective (Erdelyi, 1993). Adaptive defence mechanisms effectively regulate anxiety without unduly constricting behaviour or impairing goal pursuits. In contrast, maladaptive defence mechanisms are a pattern of responses that may have been useful in the past (e.g., in childhood) as a reaction to stress/threats, but are no longer adaptive in the present and lead to the development of further relational difficulties, which may evolve into pathologies (Bion, 1962).

There are several reasons to conceive of implicit ER (Braunstein et al., 2017; Gyurak & Etkin, 2014; Gyurak et al., 2011) as an organising principle for defence mechanisms (Gross, 1998b; Rice &

Hoffman, 2014). As Cramer (2008) notes, some core characteristics of defence mechanisms are as follows: they are unconscious mental processes directed against both internal drive pressures and external pressures; they develop according to a predictable sequence during maturation; they are part of normal personality functioning; they can lead to psychopathology when used too rigidly. Each of these characteristics is consistent with implicit ER.

As for the first characteristic, operating without active monitoring, insight or awareness (Braunstein et al., 2017; Gyurak & Etkin, 2014; Gyurak et al., 2011) is common to both Ego defences and intrapersonal, implicit, automatic ER processes; however, it should be noted that in some modern PDT perspectives, it is accepted that defence mechanisms can sometimes be activated consciously (e.g., mature defences; Erdelyi, 2001), with the latter being viewed as intrapersonal, implicit, controlled ER processes. Another parallel to the first point is that defence mechanisms are 'directed against both internal drive pressures and external pressures' (Cramer, 2006, p. 7), and implicit ER is jointly evoked by external influences and internal self-related emotional states (Gyurak et al., 2011).

In line with the second characteristic of defence mechanisms, changes in ER strategy use take place over the course of development. Psychodynamic theorists have traditionally agreed that in adults, defences are hierarchically ordered on a continuum, differing in degree of maturity, with immature (or 'lower' level) defences being maladaptive and mature (or 'higher' level) defences being adaptive (e.g., Diehl et al., 1996). Similarly, changes in ER strategy use and aptitude occur over the course of development, typically with increasing use and aptitude over time (Calkins & Hill, 2007; Gross et al., 1997; Kopp & Neufeld 2003).

Consistent with Cramer's third and fourth characteristics, mature defence mechanisms imply a greater ability to adapt to reality, so that individuals can effectively distance themselves from threatening feelings without distorting reality (e.g., humour, sublimation and altruism). In contrast, immature defence mechanisms are characterised by severe alterations in painful mental states or the radical distortion of external reality (e.g., denial, projection and somatisation; Lingiardi & McWilliams, 2017). Consequently, immature defences have traditionally been described as being related to psychopathology (Bond, 2004), whereas more mature defences have been found to relate to better personality functioning (Di Pierro et al., 2015; Granieri et al., 2017; Hersoug et al., 2002). It is also worth noting Cramer's (2006) observation that psychological health is related to not only the extensive use of mature defence mechanisms but also the use of different defence mechanisms in different contexts. In a similar fashion, the rigid application of maladaptive ER strategies is associated with different forms of psychopathology, whereas the contextually appropriate and flexible use of ER may be a marker of mental health (Becerra et al., 2016; Gyurak & Etkin, 2014; Gyurak et al., 2011). In psychodynamic therapy, a shift to more mature defence mechanisms/ER and the more context-appropriate use of defences/ER is viewed as a key therapeutic target (e.g., Psychodynamic Intervention Ratings Scales [PIRS]; Cooper & Bond, 1992).

Interpersonal ER and PDT

Many relational PDT constructs seem to involve interpersonal ER mechanisms as a common denominator, as highlighted by Rabinovich (2016) in her theoretical integrative effort. She focuses primarily on constructs that share similarities with interpersonal (extrinsic, implicit and automatic) ER, such as Bion's (1962) idea of therapeutic containment, and secondarily to Winnicott's (1949) notion of the holding environment.

In Bionian theory (1962), the therapist is considered a 'container' for the patient's distressing feelings. Through the therapist's elaboration, this unprocessed and intolerable material (i.e., beta elements) subsequently returns to the patient in a moderated, processed, and less threatening form (i.e., the alpha function). Rabinovich provided theoretical arguments, through her qualitative metasynthesis procedures applied to 40 peer-reviewed psychoanalytic articles involving ER, that therapeutic containment is conceptually related to ER; thus, Bion's beta elements are emotional elements that the therapist might be able to perceive, identify, and gradually return to the patient as alpha elements in a more symbolised and semantically defined way, as in extrinsic ER.

Rabinovich also highlights the presence of ER in Winnicott's concept of the therapeutic holding environment (1949). Specifically, when a clinician emotionally holds and safely manages a client's negative emotions, the therapist is consistently present as an attuned and reliable extrinsic ER regulator for the patient's negative affective states. However, there are no instruments specifically designed to measure these two basic constructs of PDT, which are frequently used interchangeably in the literature and are often regarded as the conceptualisation of the same clinical practice (e.g., Moss, 2008; Steckley, 2010). Thus, assessing the degree to which they are change mediators is difficult, even if some empirical evidence is suggestive. In research conducted by Choi and Goo (2012), for instance, the use of Winnicott's holding environment was found to be effective in changing mothers' nurturing attitudes.

A further parallel that can be drawn between PDT constructs and ER's interpersonal intrinsic, implicit and automatic processes involves Alexander's notion of a 'corrective emotional experience' (CEE), which conceptualises learning new ways to regulate emotions as using a safe setting to re-experience emotions that were perceived as threatening or forbidden in the patient's past (Alexander & French, 1946). In this regard, Nakamura and Iwakabe's (2018) study involving six patients isolated some CEE events in the treatment process and confirmed the crucial role of these experiences in the processes of change at both the patient's intrapersonal level and the therapeutic relationship's interpersonal level.

In the realm of PDT, ER can be conceived of as a basic mechanism of interpersonal dynamics, as described by attachment theory (Bowlby, 1988). Attachment styles reflect patterns of regulation associated with internal working models (i.e., cognitive-affective representations of the self, the others and the relationship between the self and the others) that become automated over time, leading to a stable, introjected relational style in adulthood that operates largely outside of conscious awareness (Bowlby, 1969). As Mikulincer and Shaver (2019) suggest, child-related emotional expressions in insecure attachment styles can be considered a form of interpersonal ER in which caregivers play a crucial role in dysfunctional, relevant, interpersonal situations. For example, children who have an affectively disturbed parent can develop insecure/avoidant or insecure/anxious attachment styles, which involve emotional suppression and emotional hyperactivation strategies,

respectively, in an effort to maintain the proximity with attachment figures (Mikulincer & Shaver, 2007). In this perspective, secure and insecure strategies related to internal working models, associated with expectations about the emotional availability of the other developed during early interactions with caregivers, can be interpreted as intrapersonal, implicit, automatic ER processes. Similarly, attachment-based psychotherapy can be viewed as the meta-regulation of ER processes (Costello, 2013), allowing so-called earned security (easily interpreted as interpersonal, extrinsic, implicit and automatic ER) and overcoming inadequate parenting histories to break the intergenerational cycle (Roisman et al., 2002).

In the context of PDT, the therapeutic alliance and the therapist's interventions undertaken to build and maintain therapeutic engagement can be conceptualised as interpersonal, extrinsic ER (Greenberg & Pascual-Leone, 2006), expressed in the implicit and automatic form by the patient and in both implicit and explicit, as well as automatic and controlled, forms by the therapist. Some empirical evidence may indirectly support the idea of ER as a basic mechanism in the therapeutic alliance, regardless of the therapeutic approach.─For example, a weak therapeutic alliance has been found to be associated with ER difficulties in psychotic patients in psychological treatments delivered by a multidisciplinary team (Owens et al., 2013).

From the perspective of dynamic systems theory, a conceptual framework for the study of change transversally to psychotherapies (Hayes & Strauss, 1998), alliance is based on clinical dyad mutual regulation guided by the therapist, in terms of a strategically oriented perturber (Guidano, 1987, 1991), and on the therapist's interventions to maintain adaptive ER and regulate maladaptive ones during the clinical encounter (Gelo & Salvatore, 2016). Notably, such interpersonal co-regulative processes are also evident at the somatic level in terms of psychophysiological synchronization (Kleinbub et al., 2020). From this perspective, the alliance emerges from mutual interactions between the patient and therapist, which reciprocally influence each other, as the actions of the patient influence the regulative actions of the therapist, which, in turn, influence the patient, and so on. Using this framework, Koole and Tschacher (2016) highlight that over time, these interpersonal exchanges may improve patients' ER capacities and the related therapeutic outcomes.

Although broad consensus exists that the alliance represents a core element significantly related to the outcomes of all psychotherapeutic approaches (Barber et al., 2000; Flückiger et al, 2021; Krupnick et al., 2006;), in the context of PDT, the therapeutic alliance refers to the connection between the therapist and the rational parts of the patient's Ego (Sterba, 1934), and Safran et al. (2011) conceive of alliance ruptures as failures in extrinsic ER processes (e.g., the patient reverting to using maladaptive ER strategies and withdrawing from the relationship). Following Bordin (1979), ruptures comprise (1) disagreements about the tasks of therapy, (2) disagreements about treatment goals or (3) strains in the patient-therapist bond. Given these premises, the reparative process can be based on the therapist's ability to emotionally resynchronise with the patient, a process that implies, again, extrinsic ER strategies (for a related review, see Lombardo et al. [2009]).

Finally, changes in a patient's defensive functioning level during PDT treatment are related to the therapeutic alliance's strength and quality (Hersoug et al., 2002), providing indirect evidence that intrapersonal and interpersonal ER constantly influence each other. When this interaction is adaptive, it favours the development of the therapeutic alliance.

Emotion Regulation and Cognitive-Behavioural Therapy

Classic CBT is an action-oriented therapy that assumes maladaptive patterns of thinking and behaving lead to maladaptive emotions. Historically, the focus of CBT treatment has been on altering these problematic patterns of thinking and behaving. With the arrival of the so-called third wave of CBT (Hayes, 2004), new cognitive and behavioural models and therapeutic approaches emerged, including acceptance and commitment therapy (Hayes et al., 1999), dialectical behaviour therapy (Linehan, 1993), functional analytic psychotherapy (Kohlenberg & Tsai, 1991), and mindfulness-based cognitive therapy (Segal et al., 2002).

Common to these more recent approaches is the focus on changing the function of psychological events and the individual's relationship to them rather than on directly changing or modifying them (Hayes et al., 2006). We can therefore say that in CBT, patients and therapists generally work together to identify and understand problems in terms of the relationship between thoughts, feelings, and behaviour, as well as between the patient and these three elements. The relationship between classical CBT and third wave CBT is well represented by Hayes and Hofmann, who, inspired by the 'wave' metaphor, stated that 'waves hitting a shore assimilate and include previous waves but they leave behind a changed shore' (Hayes & Hofmann, 2017, p. 245).

Intrapersonal ER in CBT

There is general agreement that ER strategies converge with coping strategies (Garnefski et al., 2001), even though the precise nature of the association remains a matter of debate.

First of all, coping strategies, broadly defined as 'intentional cognitive or behavioural attempts by the individual to manage a stressor' (Affleck & Tennen, 1996, p. 914) and conceived as adaptive in the vast majority of cases, can also be maladaptive (Watson & Hubbard, 1996), just as ER strategies can be described as more and less adaptive. Since the individual's use of maladaptive coping strategies in psychopathology appears to be associated with more severe levels of symptomatology (Tenore et al., 2008), improved coping has been viewed as a goal in CBT since it was first used in clinical settings, intervening at the level of choosing the most effective coping strategy among those conceivable by the patient (Meichenbaum, 1977; Wright et al., 2017). It is relevant to consider that many view coping strategies as being under the individual's conscious control, as they reflect explicit processes aimed at achieving an emotional goal, consistent with intrapersonal, explicit controlled ER; however, the existence of active unconscious processes during cognitive strategies, such as coping, is also acknowledged (Kihlstrom, 2015; Lazarus & Folkman, 1984).

Considering Gyurak's classifications (Gyurak et al., 2011), intrapersonal explicit ER overlaps substantially with coping. Indeed, all the processes described in Gross' (1998a, 2015) ER model, including (1) identifying emotions that need regulation, (2) selecting

an emotion regulation strategy, (3) implementing the selected strategy, and (4) monitoring the implemented strategy over time to determine whether further modification is necessary are also relevant to coping. Specifically, the focus of the ER selection strategy is on evaluating contextual factors, such as the available cognitive and physiological resources, as well as the emotional impulse's type and strength (Gross, 2015), to plan an action output.

To illustrate the different degrees of adaptivity of ER and coping strategies, we can observe that, on the adaptive pole, the term reappraisal indicates both a classical, effective ER strategy (Aldao et al., 2010) and a prominent form of coping (Kashdan et al., 2006). More specifically, reappraisal involves consciously challenging distorted thoughts and considering alternate perspectives related to a stressful situation as a way of reducing distress, and the results are detectable in the individual's positive emotional and physical responses to emotion-eliciting stimuli (Gross, 1998a). Similarly, at the opposite pole, among the less adaptive strategies, suppression is viewed as a maladaptive form of ER, which involves the conscious inhibition of emotional response's behavioral expression (Gross, 1998a), and a risk factor for psychopathology (e.g., depression, anxiety and substance abuse; Carver et al., 1989). In this regard, in Kramer's studies (Kramer et al., 2013; Kramer, 2017), changes in coping patterns from suppression to reappraisal were revealed to be crucial processes in the successful treatment of different psychopathologies (e.g., recurrent depression and borderline personality disorder).

Interpersonal ER in CBT

The therapeutic relationship's nature and role in CBT has long been discussed and debated (Muran & Barber, 2011), and only recently has the CBT clinical and scientific community begun to pay more attention to this aspect, thanks to many third wave authors who endorsed CBT's relational aspect and introduced the idea that mental representations of the self are intrinsically interpersonal (*inter alia*: Safran & Segal, 1990; Safran, 1998). There are many examples of the importance of interpersonal, extrinsic and explicit ER in therapeutic relations, as conceived in the CBT approach. Notably, interventions in which therapists teach patients ER strategies differ from interventions in which therapists regulate patients' emotions using intrinsic or extrinsic ER strategies. In the current paper, we refer only to this latter form of interpersonal ER.

In classical CBT, one point of particular focus is on working with reappraisals, which allow for (1) identifying how a particular cognitive process, such as a negative automatic thought, in a given situation affects the patient's subsequent emotions and behaviours and (2) developing and testing alternative cognitions; these steps ideally lead to the more effective management of emotions (Beck et al., 1979; Ellis, 1999). In the words of Albert Ellis (1999), who pioneered the CBT approach, 'What we call feelings almost always have a pronounced evaluating or appraisal element' (p. 71).

The classical ABC model in CBT (Dryden, 2012; Ellis & Dryden, 2007) states that when individuals are faced with certain activating events (A), they have certain beliefs (B) about these events, which largely mediate the emotional or behavioural consequences (C) of these events. If their beliefs (B) are rational/functional, then their emotional and behavioural consequences (C) will be adaptive. However, if their beliefs (B) are irrational/dysfunctional, then their emotional and behavioural consequences (C) will be maladaptive (David, 2003). Helping people change their belief systems (B) allows them to concomitantly improve their dysfunctional emotional consequences (C) (Ellis, 1991). Thus, therapists following the ABC model guide patients in a process involving the interpersonal, extrinsic, explicit, and controlled ER of reappraisal.

CBT's general approach to anxiety provides further examples of how CBT works at the level of interpersonal, extrinsic, explicit, controlled ER. Specifically, in the context of patients with generalised anxiety disorder, CBT targets the tendency towards avoidance (Borkovec et al., 2004). Avoidance is a relatively benign short-term strategy used to manage emotions but can become maladaptive when applied rigidly and inflexibly such that enormous time, effort, and energy are devoted to managing, controlling, or struggling with unwanted private events. The strategy of avoidance, which, in itself, is intrapersonal, thereby assumes an extrinsic interpersonal level of ER when patients are encouraged to expose themselves to therapists in respect to their fears of emotions, of critical feedback and of being vulnerable by showing who they really are. By trying to confront their immediate fears, clients become aware of how their avoidance of negative emotions in the short term comes at a great cost in terms of a restricted lifestyle in which their needs are not met in the long term (Castonguay et al., 2005). Therapists' promotion of patients' reappraisals will conclude therapeutic interpersonal action.

Regarding the third wave of CBT, it is worth noting that acceptance and commitment therapy, and especially mindfulness-based cognitive therapy, define mindfulness in a way that links it to the quality of patients' ER strategies (Hayes et al., 1999; Segal et al., 2002). For instance, higher mindfulness levels are associated with lower levels of maladaptive ER strategies (e.g., experiential avoidance, suppression, rumination and overgeneralisation; Feldman et al., 2007). From a psychotherapeutic perspective, among the major benefits of mindfulness practice is the development, during mindfulness-based cognitive therapy, of more effective ER strategies on the part of the patient due to the relationship with the therapist, whose internal representation in the patient allows a third-person observation of himself without judgement (for a review, see Davis and Hayes [2011]), thus favouring the regulation of emotions in terms of all the four phases included in Gross' (1998a, 2015) ER model (see the preceding paragraph). In this perspective, mindfulness-based cognitive therapy can be interpreted as a form of interpersonal, extrinsic, explicit and controlled ER.

Finally, as an interpersonal construct mediating change, the therapeutic alliance has increasingly converged with the PDT perspective over the years in the CBT literature and, hence, become more focused on ruptures and reparative processes (Pilecki et al, 2015). Specifically, the first wave behavioural approach describes the therapeutic alliance as a nonspecific, static and dichotomous factor, while classical CBT and the third wave CBT approach describe it as a process in continuous oscillation and characterized by dynamics of variable relational quality that the therapist must monitor continuously (Castonguay, 2010). Much has already been said regarding the association, widely accepted by different therapeutic approaches, between this crucial element of psychotherapy and its interpersonal, extrinsic ER (with both implicit and explicit components, as well as automatic and controlled ones).

Relevant empirical findings in the context of CBT include Cloitre et al.'s (2004) finding, in the context of a CBT-oriented trial, that the relationship between the therapeutic alliance and improved therapy outcomes was mediated by the development of ER skills during treatment in patients with anxiety symptomatology. This finding further supports the notion that the therapeutic alliance comprises mechanisms linked with ER processes. Furthermore, the fact that coping strategies' adaptation levels predict the therapeutic alliance's strength and quality (D'Iuso et al., 2009; Reynolds et al., 2017) indirectly suggests that intrapersonal and interpersonal ER influence each other during the therapeutic relationship.

Toward a Shared Conception of the Mechanisms Underlying Psychotherapy

The main aim of this contribution has been to suggest that ER processes may be crucial mechanisms underlying patients' changes in different types of psychotherapy. To develop this argument, we reviewed constructs and techniques associated with two major approaches to treatment, classically considered antipodal, namely PDT and CBT.

If we are correct that ER processes underlie therapeutic change in both PDT and CBT, as well as many other forms of therapy, then a shared understanding of intrapersonal and interpersonal processes in terms of ER can help overcome the terminological and conceptual barriers fragmenting and hindering the progress of psychotherapy research. Importantly, postulating that ER processes underlie many of the main intrapersonal and interpersonal constructs of PDT and CBT does not mean that the two forms of treatment are equivalent since, as highlighted in our contribution, different ER processes are emphasised in each of these two approaches.

For instance, implicit forms of ER seem to be predominantly used by PDT and explicit forms by CBT. In this regard, at the intrapersonal level, we have provided a scientific overview in which defence mechanisms, as well as internal working models – typical constructs of PDT – can be considered based on implicit ER processes, while coping strategies – core elements of CBT – are based on explicit ER processes. At the interpersonal level, considering the change mechanisms specific to PDT (e.g., therapeutic containment, holding environment, corrective emotional experiences, and attachment-related earned security) and CBT (e.g., the ABC model, the avoidance-exposure therapeutic approach, and mindfulness-based cognitive therapy), along with the therapeutic alliance, which applies to both approaches, implicit regulative processes seem to be more emphasised in the PDT therapeutic orientation, while explicit ER processes are more emphasised in CBT (see Table 2). However, implicit and explicit ER occur jointly more often than at the intrapersonal level.

To empirically corroborate our hypothesis that ER processes constitute a 'common grammar' transversal to psychotherapeutic approaches, it would be useful to consider the convergence between ER mechanisms (as evaluated, for instance, with Emotion Regulation Questionnaire [Gross & John, 2003] or with Cognitive Emotion Regulation Questionnaire [Garnefski & Kraaij, 2007]) and the presence of peculiar intrapersonal functioning constructs of PDT and CBT approaches such as defense mechanisms for the former (for instance with Mechanism Defence Rating Scale by Bond and colleagues [1989]) or coping strategies for the latter (for example with Ways of Coping Questionnaire by Lazarus and Folkman [1980]) on the basis of audio-video recorded psychotherapy sessions evaluated by therapist themselves in a process-oriented psychotherapy research design (e.g.: Marci and Riess, 2005).

A further innovative approach could be, again on the basis of audio-video recorded psychotherapy sessions, taking into account physiological signals as well of the patient and therapist, to measure the convergence between interpersonal ER (for example with Emotion Regulation of Others and Self Questionnaire [Niven, et al., 2011] for interpersonal ER) and high levels of physiological synchronization conceived as an indirect, non-verbal measure of therapeutic alliance (e.g.: Kleinbub et al., 2020; Mylona et al., 2022).

Since dysfunctional ER is crucial for understanding many facets of psychopathology – both according to the DSM-5 (American Psychiatric Association [APA], 2013, p. 20) and as highlighted in the previous sections – future work needs to develop a model of psychopathology based on ER, drawing on constructs from PDT and CBT. For example, it may be useful to link ER to mentalizing, whose more or less functional declinations are already considered at the basis of psychopathological development (Santoro et al., 2021).

Generally speaking, investigating the underlying principles and processes of change that cut across existing theoretical orientations appears to be a promising strategy for advancing psychotherapy integration (cf. Castonguay & Beutler, 2006). That said, many alternative views can support the idea of 'common grammar' elements that are blended into an understandable common-ground language. For example, the assimilative integration (Messer, 2015, 2019) perspective proposes a model of conducting psychotherapy in which a technique, concept or perspective is incorporated into one's home or preferred therapeutic approach from another form of therapy, implicitly implying a rough compatibility among basic elements in which the approaches are based. Another integrative perspective shared by different schools of thought is that of dynamic systems theory; it is an interdisciplinary conceptual model based on mathematical principles applicable to the study of all living systems' interactions and has been proposed as a perspective capable of providing a meta-framework to understand the change mechanisms of psychotherapies, independently of their orientation (Hayes & Strauss, 1996). In this view, ER processes can be generally viewed as the trigger for second-order changes generated by interactions between the subsystems, which, in turn, impose a modification on the system itself, a dynamic that could achieve positive outcomes in psychotherapy (Salvatore et al., 2015).

Conclusions

We have argued that intra- and interpersonal ER processes are core mechanisms underlying therapeutic change across differing theoretical perspectives. We developed this argument via a comparison of two major therapeutic approaches: PDT and CBT. This perspective contributes to our understanding of the core change mechanisms underlying diverse theoretical approaches to psychotherapy and suggests the need for future research investigating the role of ER processes in other therapeutic approaches.

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