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Assessment of self-contempt in psychotherapy: a neuro-behavioral perspective

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Author note

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Abstract

Objective: The aim of this methodological paper is to present self-contempt, and its assessment, in a broad transdiagnostic framework of psychopathology and related with change in psychotherapy. Self-contempt may be a central phenomenon in many psychological disorders. We outline methodological recommendations for the study of complex transdiagnostic phenomena which involve multi-level bio-behavioral responses.

Method: We illustrate the assessment of self-contempt as complex transdiagnostic phenomenon with a study in which emotion-eliciting two-chair dialogues focused on the elaboration of self-criticism, and an observer-rated system was applied to assess each client's expressed self-contempt at the moment of enacted self-criticism. The client's own self-contemptuous words were extracted from this self-critical dialogue and then later presented as part of a functional Magnetic Resonance Imaging paradigm.

Results: This assessment paradigm was applied to a brief treatment for clients with borderline personality disorder and results of pre-post change over time in markers of self-contempt are presented.

Conclusions: The importance of the assessment of self-contempt in an ecologically valid manner, by using individualized stimuli and taking into account multi-level activations, is discussed in the context of a transdiagnostic conception of psychopathology and in the context of change in psychotherapy.

Key-words: Contempt; Emotion; Transdiagnostic; Neuro-Behavioral; FMRI; Assessment

Practitioner points.

1. Self-contempt may a central transdiagnostic process which clinicians should take into account.

2. Self-contempt may be assessed both from an observational behavior perspective, as well as from a neuroimaging perspective.
3. Self-contempt should be differentiated from other emotional states, such as anger, and emotional variables, such as emotion transformation, in the assessment of client's problems and resources.
4. Assessment of self-contempt should take into account the emotional engagement, or arousal, of the client with the therapeutic process.

Contempt as a transdiagnostic variable

As an emotion, *contempt* has been described as combination of disgust and cold anger (Ekman & Friesen, 1978). Contempt *towards the Self* may be a central feature of general psychopathology and can be formulated as a transdiagnostic variable. Whereas clients with various mental disorders present markers of highly negative thoughts and negative evaluations of the Self (Everaert, Podina, & Koster, 2017; Kannan & Levitt, 2013; Longe, Maratos, Gilbert, Evans, Volker, Rockliff, & Rippon, 2010; Schmidt & Joiner, 2004; Winter, Bohus & Lis, 2017), it is often overlooked that the *underlying* emotional process is often substantiated by non-verbal and paraverbal expressions of contempt towards the Self (Greenberg, 2002; Hooley, Siegle, & Gruber, 2012). Whelton and Greenberg (2005) were among the first who studied self-critical processes marked by self-contempt in dysthymic individuals. They showed that the cognitive contents of the self-criticism were similar across participants, consistent with what was found in the meta-analysis by Everaert et al. (2017). However, when the researchers tried to predict incremental symptom loads in their sample, the non-verbal and para-verbal emotional processes of self-contempt, was the only factor differentiating individuals with more or less depressed mood. In other words, the “*way one criticizes oneself*” was a more critical factor than the actual criticisms one had. Although this example illustrates the incisiveness of self-contempt as a construct, it is not confined to depression.

Self-contempt may be present across diagnostic categories. Self-disgust, a phenomenon of the same basic processes as self-contempt, is not only high in depression, but also in individuals with borderline personality disorder, schizophrenia, eating disorders and spider phobias, compared to healthy controls (Ille, Schögl, Kapfhammer, Arendasy, Sommer, & Schienle, 2014). Interestingly, the research has distinguished between behavioral disgust (i.e.,

limited to a reaction to one's behavior) and personal (i.e., pertaining to the person as a whole) disgust. For all diagnostic categories, the broader personal disgust was higher than behavioral disgust, which was not the case among healthy controls. This study used self-report measures with known biases of social desirability in particular when it comes to rating moral, or interpersonally sensitive, emotions such as disgust or contempt (Hutcherson & Gross, 2011). Gottman (1994) also highlighted the critical nature of contempt in a couple's interaction, by showing that when one member of the couple expressed contempt towards the partner, it predicted divorce 5 years later.

Clinically, contempt may be observed in many other clinical situations. For example, a client with narcissistic personality disorder (treated by the first author) raised his chin, rolled his eyes and voiced a strong sigh at the therapist when the latter suggested that the described couple conflict may involve both partners (not just the client's wife). While contempt expressed at others, such as in this example, is observable across situations, and in questionnaire studies, self-contempt is a more hidden phenomenon, but central to a transdiagnostic understanding.

From a transdiagnostic and integrative viewpoint, self-contempt may be conceptualized as the individual's specific self-organization (Greenberg et al., 1993) marked by multi-level and parallel activations, that amount to the embodiment of a harsh negative self-evaluation. In this way, self-contempt is associated with a particular action tendency (i.e., symbolically "spitting" on the Self), and associated parallel activations on cognitive (i.e., cognitions like "I despise myself" or insulting statements of the person), physiological (i.e., increased, but controlled arousal, in the sense of a "cold anger") and affective levels (i.e., harshness in the voice when speaking about oneself, contempt). Spitting out the undesirable aspects of oneself, i.e. the "bad self," from a more agentic "critical self," entails a dialogical relationship between angry feelings

of that reject and push away vs. an experience of underlying shame, regarding what is deemed unacceptable about oneself. In some sense, this is the analogue of a somatic autoimmune disorder being played out in the landscape of identity in psychopathology. As such, from an integrated emotion-focused perspective, the most pernicious aspect of self-contempt may be a type of rejecting anger (Pascual-Leone et al., 2013) turned onto the self, in which the aim is to get rid of a particular aspect of oneself. Fundamentally, this is an issue of relation between parts, as much intra-psychically as it could be interpersonally. In self-contempt, or rejecting anger towards oneself, the relational conflict is projected onto an internal space within the individual which turns one's intense (but "cold" or distancing) anger towards oneself. In addition to the psychological components, the experience of self-contempt may also be associated with a network of biological and neurofunctional activations in the brain, although clear associations lack (see Calder, Lawrence, & Young, 2001). This suggests it should be assessed at multiple levels of observation.

Consistent with these elaborations, we hypothesize that self-contempt may be an entry point to study emotional transformation processes in psychotherapy as potential mechanisms of change. Understanding, accessing and then transforming more secondary emotional experiences – such as self-contempt – into more healthy emotional experiences – such as self-compassion (Pascual-Leone, 2018) –, is central to understand how activated experience affects long-lasting change in the individual's memory structures across psychotherapy (Lane, Ryan, Nadel & Greenberg, 2015). Clarifying the details of such transformation processes is key for understanding outcomes in psychotherapy (Cuijpers, Reijnders & Huibers, 2019, Kazdin, 2009; Kramer, 2019).

From this definition of self-contempt, several methodological considerations may be delineated for transdiagnostic approaches to assessment of complex phenomena in psychopathology: (1) Self-contempt needs to be experienced by the individual at the moment of assessment, in order to be able to assess its multi-level activation in an ecologically valid manner. (2) The stimulus which triggers contempt could differ widely from one individual to the next, which calls for an individualized (rather than standardized) approach to assessment. (3) In order to capture the multi-level activation of self-contempt, multiple methodologies need to assess different aspects of the individual's experience of self-contempt and their results need to be contrasted and triangulated.

Assessing self-contempt: Using observation in context

In order to respond to the first implication above of a transdiagnostic approach to measurement of self-contempt, Kramer and Pascual-Leone (2016) sought to assess self-contempt as it appears during the clinical process, basing their criteria on prior work by Whelton and Greenberg (2005), Ekman and Friesen (1978), and Gottman (1994). They used a 3-point anchored Likert-type scale, to be applied in session video as a continuous moment-by-moment assessment. This rating procedure describes the intensity of self-contempt expressed by an individual, taking into account verbal, para-verbal and non-verbal aspects. Examples of non-verbal criteria include curled lips, raised chin, eye rolling and dismissive waving, while para-verbal criteria include using a sarcastic voice, and external voice quality and disruptive vocal pattern. And verbal criteria include the more self-apparent observations of client's harsh self-criticisms and insults.

Observational tools applied to highly dynamic process, like emotion, rely on a quasi-standardized context. One way of creating this context is to use a two-chair dialogue from

experiential and emotion-focused therapy as the assessment context (as done by Greenberg, 2002; Whelton & Greenberg, 2005). The purpose of doing this is to create an ecologically valid assessment: the participant is instructed to criticize oneself, imagining sitting across and being in a confrontation with oneself, which may evoke self-contempt during the deliberate enactment of criticism (Kramer et al., 2016; Whelton et al., 2005). Another reason for giving the context special attention, is that enacting maltreatment of the self often evokes a sense of vulnerability, as well as concerns about impression management and social desirability. For these reasons, incidental observations of self-contempt, which is usually not fully in awareness, are more useful and more revealing than other methods, such as self-reports.

Using this assessment approach, Kramer and Pascual-Leone (2016) observed individuals with anger problems expressed more intense self-contempt, when compared with less angry individuals. This result was related with the intensity of existing symptom as well as the difficulty individuals had in identifying and articulating their existential need, when they had the opportunity to respond to their criticisms. This assessment module responds to the first issue for transdiagnostic assessment, by ensuring ecological validity, and it responds partially to the second one (i.e., using an individualized stimuli). However, it does not assess multiple levels of activations as related with self-contempt.

A neuro-behavioral paradigm for measuring treatment-related changes in self-contempt

In order to respond fully to the second and third issues of a transdiagnostic approach to self-contempt, we use a neuro-behavioral assessment of change in psychotherapy. The second implication is based on what was called in psychopathology research the “emotion stimulus critique” (Pascual-Leone, Herpertz, & Kramer, 2016). This critique points out that standardized stimuli used in experimental paradigms fail to provide an (internally and externally) valid

context for evoking an emotional response in individuals that is of interest to the study. In particular in clinical psychology and psychotherapy research, it is not sufficient to know that a standardized stimulus elicits a particular type of emotion in 60% of the cases, as shown for several types of stimuli (e.g., Schaefer, Nils, Sanchez, & Philippot, 2010), lest to accept a very large margin of error. Pascual-Leone et al. (2016) argue that such deviation from the standard response is itself part of the variable of interest. Therefore, individualized stimuli, gained in a first step of assessment with the same individual, may be used as a context for studying emotional processes in psychopathology and psychotherapy. For the assessment of self-contempt, the words used by the individual in the self-critical dialogue as explained above may be extracted and used in further assessment of the same individual.

In order to respond to the third issue for transdiagnostic assessment of self-contempt, the need for multi-level assessment, Kramer and colleagues (2018) followed this two-step procedure and assessed self-contempt within the context of a small pre-post study on the treatment of eight female clients with borderline personality disorder. In the first step of the assessment procedure, from a two-chair dialogue, in which clients were prompted to criticize themselves, the researchers extracted the self-contemptuous words used by a client (e.g., “looser”, “fat”, “stupid”). In the second step, at another point in time with the same individuals, the researchers presented those same words, together with standardized negative, and neutral words, in a passive viewing paradigm while using functional Magnetic Resonance Imaging (fMRI). Findings showed the personally relevant words of self-contempt were related with the highest levels of self-reported arousal, when compared with the standardized negative and the neutral words.

These two-step assessments were repeated pre and post of the brief psychiatric treatment, creating two time points. Comparing pre vs. post treatment assessments, emotional arousal

during the two-chair dialogue decreased with a large pre-post effect ($d = .80$), a change which was correlated with symptom relief for these severely impaired clients. Self-contempt also decreased slightly between pre- and post ($d = .54$), and these changes in self-contempt were also associated with symptom decrease (Spearman $\rho = .88$). In addition to the behavioral markers, pre-post treatment showed effects in the neurofunctional activation in how individuals responded to their personalized words of self-contempt. Specifically, responding to their key words of contempt changed over treatment in the degree to which the sub-cortical brain region of the putamen was activated, which was interpreted as increased resources allocated to the treatment of complex tasks, when facing individualized stimuli (Kramer et al., 2018). When clients were exposed to contempt in their own words, decrease in their ratings of arousal over treatment was associated with increase in the neuronal activity in the bilateral precuneus, which is known to be associated with self-reflective awareness. Interestingly, these neurofunctional activations were not directly related with the intensity of self-contempt in the two-chair dialogue, but the level of arousal in the two-chair dialogue was positively associated with each of these levels of activation. Arousal may be a core dimension of emotion explaining the effects associated with both the category of self-contempt when criticizing oneself, and the objective activation on a biological level. Despite the small sample size of this study, the proof of concept and the operational feasibility of an integrated neuro-behavioral assessment of self-contempt were demonstrated; more research into the validity of each of these assessments will be necessary. This assessment of self-contempt responds to all three issues of a transdiagnostic assessment in psychopathology and may thus be used in further research in psychopathology and psychotherapy.

Perspectives on future directions and applications

At a moment when medical science moves toward personalized assessment and treatment based on genome-related information, individuals may start to receive tailored treatments (Mathur & Sutton, 2017). For clinical psychology and psychotherapy, personalized intervention and assessment should respond to the highest possible standards (i.e., internal and external validity, use of individualized assessment and of integrated multi-level paradigms), so a transdiagnostic and individualized approach seems particularly promising. Focusing on self-contempt is central, because of its potential to undermine effective treatments and its centrality across diagnostic categories. It seems therefore important to assess self-contempt in research and practice, as an initial step of a transformative emotional process, which may eventually see the emergence of more self-compassion or self-soothing in the individual (Pascual-Leone & Greenberg, 2007). While emotion-focused therapy (Greenberg, 2002) directly fosters such emergence of self-compassion, other therapy approaches, such as compassion-focused therapy (Gilbert, 2010; Longe et al., 2010), help train the individual up to be able to develop such a compassionate stances towards the Self. The transformative process underlying the undoing of self-contempt, towards self-compassion, may involve a complex network of multi-level processes, including emotion arousal, the idiosyncratic coming into awareness of the individual's core need (Kramer et al., 2018; Pascual-Leone, 2018), and fundamental changes in memory structures (Lane et al., 2015). Assessing self-contempt across psychotherapy could help provide essential information about the emotional nature of this network of processes presumably taking place across different types of psychotherapies.

Compliance with Ethical Standards

The authors declare to have no conflicts of interest related to this ms. Since this is a methodological paper, no human participants were specifically recruited for this study, and no

consent was necessary. For the data cited from a parent study, compliance with ethical standards is guaranteed via this parent study.

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