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Wise Additions Bridge the Gap between Social Psychology and Clinical Practice: Cognitive-Behavioral Therapy as an Exemplar

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Abstract

Progress in clinical science, theory, and practice requires the integration of advances from multiple fields of psychology, but much integration remains to be done. The current article seeks to address the specific gap that exists between basic social psychological theories and the implementation of related therapeutic techniques. We propose several “wise additions,” based upon the principles outlined by Walton (2014), intended to bridge current social psychological research with clinical psychological therapeutic practice using cognitive behavioral therapy as an example. We consider how recent advances in social psychological theories can inform the development and implementation of wise additions in clinical case conceptualization and interventions. We specifically focus on self and identity, self-affirmation, transference, social identity, and embodied cognition, five dominant areas of interest in the field that have clear clinical applications.

According to the Society of Clinical Psychology (Division 12 of the American Psychological Association), the field of clinical psychology “integrates science, theory, and practice to understand, predict, and alleviate maladjustment, disability, and discomfort as well as to promote human adaptation, adjustment, and personal development [and] focuses on the intellectual, emotional, biological, psychological, social, and behavioral aspects of human functioning across the lifespan, in varying cultures, and at all socioeconomic levels.” Progress in clinical science, theory, and practice requires the integration of advances from multiple fields of psychology. Despite these aspirational goals, clinical psychology vastly underutilizes science from other domains of psychology.

Social psychology is replete with opportunities to improve clinical science. Basic social-cognitive, emotional, and interpersonal processes have long been recognized as crucial to the development and treatment of psychopathology. Indeed, most clinical problems have an intrinsically social/situational nature. Integrating social psychological concepts into clinical practice can not only improve understanding of emotional problems and emotion regulation dysfunction, cognitive distortions, and maladaptive behaviors, but it can also augment the basic research support base for therapeutic techniques. A more comprehensive understanding of social-cognitive and social psychological theory and research may be a key ingredient to increasing therapeutic effectiveness.

Consider cognitive-behavioral therapy (CBT), often cited as a “gold standard” treatment for a number of psychological disturbances (e.g., most anxiety, depressive, and impulse control disorders; see APA Presidential Task Force on Evidence-Based Practice, 2006). A recent examination of the long-term effectiveness of CBT for patients with anxiety and depressive disorders treated in a naturalistic, fee-for-service setting (i.e., outside of a research context) only yielded a responder rate of 62% (DiMauro, Domingues, Fernandez, & Tolin, 2013). Study after study demonstrates that CBT is ineffective for a subset of clients. Thus, even CBT, which was originally influenced by earlier work in social cognition and is an integrative approach to psychotherapy (e.g., Alford & Beck, 1998; Benjamin et al., 2011; Cross, 2007; Shadel, 2010), can benefit from the incorporation of recent advances in social psychology.

Despite the potential for applications of social psychology research in clinical psychology (and vice versa), certain barriers have hindered this integration (Hill & Weary, 1983) and made for a tepid alliance (Brehm & Smith, 1984). For progress that has been made, many of the proposed changes have been largely theoretical and infrequently translated into novel therapeutic approaches. Moreover, recent advances in social cognition and social psychology have yet to be adequately integrated. Accordingly, the purpose of the present article is to highlight a number of recent developments in social psychology that have yet to be integrated into clinical psychology. To this end, we provide several suggestions for the translation of social psychological concepts, as they relate to therapeutically relevant psychological phenomena, into “wise” additions (based upon the principles of wise interventions; Walton, 2014) to be utilized in the clinical context. We focus our discussion specifically on CBT, given its robust empirical support and widespread use among community therapists, but the wise additions suggested here can and should be applied to other therapeutic modalities.

Prior Integration of Social and Clinical Psychology

The cognitive revolution in psychology was an important impetus to the integration of social and clinical psychology because it increased psychologists’ awareness of the utility of a cognitive approach to understanding human behavior. For example, social psychological perspectives on attributional approaches were first applied decades ago to understanding how one’s interpretations and reactions can foster psychological distress (Abramson, Seligman, & Teasdale, 1978; Valins & Nisbett, 1972). In terms of psychological impact, the objective situation is arguably less relevant than the individual’s thoughts and interpretations of that situation—what social psychologists refer to as “subjective construal.” As clinicians have increasingly recognized, a client’s attribution of causality in combination with their self-concept can influence emotional and behavioral responses across a range of situations (e.g., Abramson et al., 1978; Alloy, Abramson, Metalsky, & Hartlage, 1988). Such influences operate through habitual cognitive styles that guide interpretations of ambiguous situations (Riskind & Alloy, 2006). For example, depressed individuals tend to attribute negative outcomes to internal, stable, and global causes, such as irremediable personal defects, rather than external, unstable and specific causes. Similarly, individuals with a “hostile attribution bias” (Dodge, Prince, & Newman, 1990) tend to attribute provocative, hostile intentions, injustice, or unfairness to others in ambiguous contexts.

As another illustration, research on cognitive priming, defined as the effects of exposure to a stimulus on the availability of material in working memory, has been incorporated to a limited degree in clinical research. For example, some clinical researchers have posited that negative life events (Riskind & Rholes, 1984) and moods (Segal & Ingram, 1994) can prime dysfunctional attitudes and concepts that can influence an individual's vulnerability to depression. Furthermore, Westen (1991) proposed the integration of social cognitive approaches regarding the encoding and storage of social information with object relations theory in order to better understand phenomena such as poor social functioning in Borderline Personality Disorder.

In addition to social cognition work, there are several aspects of recent work on individual differences in emotion and cognition that have yet to be fully incorporated in clinical psychology. Ample research related to self-concept, much of which is applicable to clinically relevant phenomena (e.g., Tangney & Salovey, 1999), suggests that individuals typically have "multiple selves" (e.g., Klein, 2012; Linville, 1987; McConnell, Shoda, & Skulborstad, 2012). The degree to which clients' self-concept is based upon identification with their clinical diagnosis is relevant to their global functioning, such that internalizing the label of "being mentally ill" is associated with the potential for negative outcomes (e.g., Rosenfield, 1997). Other clinically relevant individual differences in affect and cognition that have attracted attention in integrative social-clinical research include attributional style, negative affectivity, interpersonal dependency, and self-consciousness (Kowalski & Leary, 1999). The finding that the effectiveness of therapy is moderated by the client's self-concept is one of many examples in which attending to individual differences in preferences for and responses to particular therapeutic approaches can elucidate mechanisms of effective therapy (Beutler, Clarkin, Crago, & Bergen, 1991).

The Research-Practice Gap

One major impediment to cross-disciplinary integration is the gap that separates the larger literature on social psychology concepts and research from psychological practice. As many scholars have noted, therapists typically acknowledge they rarely consider research findings—especially outside of their specialties—in the course of their clinical practice (Cohen, Sargent, & Sechrest, 1986; Maddux, Stoltenberg, Rosenwein, & Leary, 1987; Morrow-Bradley & Elliott, 1986; Shafran et al., 2009). One explanation may be clinicians' desire to be free and independent originators of effective treatment and to avoid what Bloom (1973, 1995) refers to as the "anxiety of influence"; another may be temperamental and epistemological differences between clinicians and researchers (Arthur, 2001). Further, many practicing psychologists overlook the direct relevance of social psychological research to their work with clients. In many cases, the application of particular social psychological findings to therapeutic processes goes unstated in research articles and, therefore, goes unrecognized by clinical practitioners (Ruble, Costanzo, & Higgins, 1992). However, expecting clinical practitioners to read basic social psychological articles, develop targeted interventions based on their results, and implement them with their clients may be unrealistic.

Wise Additions

When considering what relevant social psychological research to incorporate in clinical science and practice, and how, discretion is warranted. In the broader applied literature, Walton (2014) defines *wise interventions* as novel, brief, and psychologically precise interventions driven by research-based theory that “aim to alter self-reinforcing processes that unfold over time and, thus, to improve people’s outcomes in diverse circumstances and long into the future” (p. 75). Wise interventions, which are often derived from social psychological theories, aim to alter how individuals think and/or feel during the course of their everyday lives and ultimately, help them flourish.

Walton suggests that when interventions are crafted “wisely” (e.g., in a manner relevant to the matters and the population at hand), they have a lasting impact on diverse outcomes (e.g., Cohen, Garcia, Purdie-Vaughns, Apfel, & Brzustowski, 2009; Finkel, Slotter, Luchies, Walton, & Gross, 2013; Walton & Cohen, 2011). For example, wise interventions in social psychology have targeted enhanced marriage satisfaction by writing about how a neutral third party would view a marital conflict on three occasions across one year (Finkel et al., 2013); increased participation in elections through pre-election surveys using nouns rather than verbs to represent an opportunity to become a certain kind of person (Bryan, Walton, Rogers, & Dweck, 2011); reduced likelihood of infant abuse in at-risk mothers by generating causes of infant-related problems until (1) a non-self-blaming reason and (2) a non-child-blaming reason are identified (Bugental et al., 2002); and reduced hospital readmissions for individuals previously hospitalized for self-poisoning by sending them eight postcards across one year that expressed the hospital’s care and concern (Carter, Clover, Whyte, Dawson, & D’Este, 2013).

Brehm (1976) was perhaps the first to apply social psychological “mini-theories” to clinical practice. Her conceptualization offers a broad view of the clinical relevance of social psychology by demonstrating how dominant social psychological theories of the day (e.g., resistance, dissonance, attribution theories) contribute to understanding and treating psychological disturbances. Since her seminal work, others have argued for a more formal integration in which social psychological theory could enhance clinical approaches to various mental health problems (Harvey & Weary, 1979); proposed research-oriented suggestions for clinical applications in social psychological research, and the more targeted dissemination thereof (Kopel, 1982); and identified impediments to integration, including differences in theory, professional contact, and psychological practice (Kowalski & Leary, 1999).

Wise additions provide clinical researchers and practitioners with opportunities to understand psychological processes of and create solutions to therapeutic problems. That is, wise additions can be used to enhance existing therapeutic treatments. Rather than acting as a stand-alone technique, these brief, theoretically driven, and psychologically precise wise additions can serve as adjuncts to standard treatments such CBT, Acceptance and Commitment Therapy (ACT), Dialectical Behavioral Therapy (DPT), Interpersonal Therapy (IPT), or other modalities to enhance their effectiveness.

The present article seeks to address the gap between basic social psychological theories and the implementation of related therapeutic techniques. We propose several “wise additions,” based upon the principles outlined by Walton (2014) that are intended to bridge current social psychological research with clinical psychological therapeutic practice. In the current paper, we consider how several recent advances in social psychological theories can inform development and implementation of wise additions in clinical case conceptualization and interventions. We selected five theoretical contributions from social psychology that are dominant areas of interest in the field and have clear clinical applications to psychotherapeutic approaches and cognitive-behavioral therapy in particular: self and identity, self-affirmation, transference, social identity, and embodied cognition.

Beliefs about the Self

Beliefs about the self, such as self-worth, self-efficacy, and locus of control, are closely related to adjustment (Cheng, Cheung, Chio, & Chan, 2013; Karademas, 2006; Sowislo & Orth, 2013) and have been successfully incorporated into several therapeutic modalities (Hartman & Blankstein, 2013). More recently, attention has been paid specific to beliefs about whether a person can change. Carol Dweck has demonstrated through her robust program of research that people have varying beliefs about *the modifiability of the self*, or the many attributes about a person, including personality traits, intellect, physical appearance, or physical abilities. Dweck’s self-theory (2000) proposes that people vary on the extent to which they believe attributes of the self are fixed versus malleable. Individuals who view the self as fixed believe the self is unchangeable and uncontrollable (“entity theorists”). In contrast, individuals who view the self as malleable view the self as changeable and controllable (“incremental theorists”). Beliefs about the self can be either global or domain-specific, and beliefs about specific aspects of the self are independent from one another. For example, an individual can hold a fixed theory of intelligence and a malleable theory of emotion. Evidence suggests malleable self-theories are related to positive outcomes in academics (e.g., Aronson, Fried, & Good, 2002; Blackwell, Trzesniewski, & Dweck, 2007; Cury, Da Fonseca, Zahn, & Elliot, 2008; Good, Rattan, & Dweck, 2012), social relationships (e.g., Beer, 2002; Finkel, Burnette, & Scissors, 2007; Kamrath & Dweck, 2006), the workplace (e.g., Heslin & Vandewalle, 2008; Kray & Haselhuhn, 2007), and emotional and physical health (e.g., Biddle, Wang, Chatzisarantis, & Spray, 2003; Burnette & Finkel, 2012; Tamir, John, Srivastava, & Gross, 2007).

The self-theories that individuals endorse relate to several domains of functioning in meaningful ways. For example, holding a malleable self-theory relates to greater openness to learning, willingness to confront challenges, ability to persevere through difficult tasks, and capability of bouncing back from failures (Dweck, 1999). These qualities promote success across a variety of domains, including better performance during difficult school transitions (Blackwell et al., 2007) and when difficulties arise in interpersonal relationships (e.g., Kamrath & Dweck, 2006). In contrast to malleable beliefs about the self, a fixed mindset is related to avoiding challenges (e.g., Blackwell et al., 2007; Robins & Pals, 2002) and less resilience in the face of setbacks (e.g., Blackwell et al., 2007; Hong, Chiu, Dweck, Lin, & Wan, 1999; Nussbaum & Dweck, 2008; Robins & Pals, 2002).

A person's beliefs about the self can influence their goal preferences and attributions, which in turn has implications for behavior (Aronson et al., 2002; Dweck, 1999; Hong et al., 1999; Robins & Pals, 2002). For example, when asked to choose between getting a good grade and being challenged in class, entity theorists were more likely to choose obtaining a good grade than incremental self-theories, who were more likely to choose being challenged in class (Dweck, 1999). In regards to attributions, entity theorists tend to attribute blame related to poor performance to their fixed ability, whereas incremental theorists tend to attribute poor performance to low effort and their current, but changeable, ability (Hong, et al., 1999). Differences between entity and incremental self-theorists have even been found at the neurological level when completing a learning task. Incremental theorists showed more "sustained deep semantic processing of learning-relevant information," whereas the brains of entity theorists showed significantly less activity in the learning centers and more activity in areas related to emotion regulation such as the limbic system (Hall, 2007; Mangels, Butterfield, Lamb, Good, & Dweck, 2006). These divergent patterns of neurological processing likely relate to constructs such as goal preferences and in turn behavior.

Although self-theories tend to be relatively stable over time (Robins & Pals, 2002), evidence suggests they can be altered. Social psychological research has shown that self-theories of intelligence and self-control can be manipulated to produce meaningful behavioral changes (e.g., Aronson et al., 2002; Job, Dweck, & Walton, 2010). For example, individuals induced to adopt a malleable theory of willpower made fewer mistakes after a depleting task than individuals induced to hold a fixed theory of willpower (Job et al., 2010). In educational settings, interventions that promote a malleable theory of intelligence lead to higher grade point averages and greater enjoyment of academics (Aronson et al., 2002), and improvement in overall math and reading performance (Good, Aronson, & Inzlicht, 2003). These examples highlight the malleability of implicit self-theories and open the door for inclusion of targeted interventions to alter diverse aspects of functioning.

Given the broad relevance of self-theories to psychological change, we describe how they can be used to develop new techniques for dealing with client resistance. Resistance in CBT is often conceptualized as the consequence of maladaptive beliefs and thoughts (Leahy, 2001). For example, clients with a core belief of helplessness may believe they cannot change themselves, and consequently, any of their symptoms. They may believe the therapist needs to "fix" them because they cannot help themselves through homework assignments. Through the lens of self-theories, holding a fixed belief about oneself promotes resistance to learning and applying coping skills such as cognitive restructuring. They believe they cannot change and learning skills is a futile endeavor. Similarly, ineffective, halfhearted-attempts to practice skills or solve problems will lead to poor outcomes that reinforce beliefs that they cannot change.

Interventions similar to the social psychology experiments on self-theories, as these beliefs may be one driver of resistance, could augment established CBT approaches to resistance. Experimental manipulations have utilized a variety of approaches including completing biased questionnaires to foster agreement with a particular self-theory (e.g., Job et al., 2010, 2013; Vohs, Baumeister, & Schmeichel, 2012), reading articles related to implicit theories about the specific domain (e.g., Blackwell et al., 2007; Dinger & Dickhäuser, 2013; Dweck,

1999), participating in multi-faceted multiple session interventions including components such as scientific readings and group discussions (e.g., Blackwell et al., 2007), and viewing lectures and film clips about the malleability (or fixed nature) and then writing letters to others conveying a parallel message (e.g., Aronson, Fried, & Good, 2002).

Perhaps most pertinent to psychotherapy would be 1) receiving some form of psychoeducation on the malleability of the self and 2) discussion around the psychoeducation. The psychoeducation might be a film or article delineating scientific research on the malleability of personality and symptoms. In group therapy, the discussion could be with the clients together during session, and for individual the “discussion” could be the client writing a letter to himself or a loved one about how the information he learned applies to himself. For example, a client struggling with alcohol addiction could receive psychoeducation on Baumeister, Vohs, & Tice’s (2007) theory of self-control as a muscle that can be strengthened. Then the client could write a letter to their spouse about how they can develop the self-control needed to resist alcohol. Although attempts to reinforce beliefs about the possibility of change are embedded into CBT, using wise interventions from the social psychology research on self-theories could strengthen this treatment component; these are simply one type of belief we suggest should be underscored from the broad scope of beliefs traditionally focused on in CBT.

If clients hold strong fixed self-theories, psychoeducation and discussion alone may not be enough to alter their self-theory. Integration of self-theory content with existing techniques such as cognitive restructuring and behavioral experimentation from CBT may offer additional value. For example, clients could be prompted to challenge their view that the self is entirely fixed (an “all-or-nothing” thinking mistake) or be asked to provide evidence of its malleability. Clinicians could also encourage clients to complete a semi-challenging task that they will demonstrably improve on with effort over a short time. If clients can provide evidence from their own experiences and see malleability occurring in the present, they may be more likely to adopt the incremental self-theory.

Self-theories can also be targeted more implicitly through the use of selective reflections. Therapists can make use of reflections by targeting them toward encouraging an incremental self-theory. Rather than providing person or trait-centered feedback (e.g., “You are so smart”), therapists can provide effort- and strategy-centered feedback (e.g., “You chose good strategies and worked hard to meet your goal”). Effort- and strategy-centered feedback shifts the focus to the process, which involves room for growth and promotes an incremental mindset. Attributions related to effort and strategies (relatively malleable) compared to a fixed entity in the self – such as intelligence (relatively fixed) – have been shown to elicit positive emotions, self-monitoring behaviors, self-encouragement, development of an optimistic outlook about outcomes, and increased enjoyment of learning (Aronson et al., 2002; Dweck, 1975; Dweck, 1999; Dweck, 2006; Dweck & Reppucci, 1973; Hong et al., 1999; Robins & Pals, 2002). This subtle shift in the focus of reflections may promote lasting change in one’s self-theory and subsequent behavioral change.

Self-Affirmation

Self-affirmation theory posits that people are motivated to maintain a global perception of adequacy rather than perceived worth in specific domains (Steele, 1988; McQueen & Klein, 2006; Sherman & Cohen, 2006). Steele (1988) proposed the concept of a general ego-protective system which functions “to affirm an overall self-concept of worth after it has been threatened” (p. 266). He suggested that individuals who experience a threat to their perceived goodness and worth, and who lack a way to address or disprove the specific claims of a threat, may attempt to prove their overall goodness in other ways. For example, engaging in self-affirmations (i.e., an act that demonstrates a person’s adequacy; Cohen & Sherman, 2014) promotes a view of the self as capable and adaptive and diminishes the need to rationalize away threatening information (Sherman & Cohen, 2006; Steele, 1988). This in turn allows for evaluation of the self in specific domains and increased openness to threatening information (e.g., Howell & Shepperd, 2012; Reed & Aspinwall, 1998; Sherman, Nelson, & Steele, 2000; van Koningsbruggen, Das, & Roskos-Ewoldsen, 2009).

Steele’s (1988) proposal emphasizes the importance of self-worth in the experience of cognitive dissonance. He suggests the existence of a psychological system with the purpose of maintaining “a phenomenal experience of the self – self-conceptions and images – as adaptively and morally adequate” (p. 262). He further proposes it is not inconsistency that is threatening, but rather “the threat the inconsistency poses to the perception of self-integrity” (p. 262). Possessing a positive sense of self provides a resource to affirm one’s worth when faced with threatening information, so those with more positive self-concepts are better able to tolerate specific self-threats, such as those occurring in dissonance situations.

A positive self-concept can buffer against self-concept threats and alleviate the need to neutralize the threat directly. In one study, when self-esteem resources were highlighted before participants were induced to make a dissonant choice, individuals with high self-esteem demonstrated less of a need to justify their choice than did those with low self-esteem (Steele, Spencer, & Lynch, 1993). Researchers have since shown that self-affirmation helps individuals accept self-threatening information in a variety of contexts. Examples include accepting personally-relevant information about health risks (e.g., Reed & Aspinwall, 1998; see Harris & Epton 2009 for a review); stopping rumination after poor performance toward a goal (Koole, Smeets, van Knippenberg, & Dijksterhuis, 1999); defusing the defensive display of conviction after considering a personal dilemma (McGregor & Marigold, 2003); and reducing accessibility of thoughts about death (Schmeichel & Martens, 2005). Self-affirmation has also been shown to prevent suppressed thoughts from becoming paradoxically more accessible after attempts at suppression cease (Koole & van Knippenberg, 2007). Taken together, self-affirmation methods are a robust mechanism for reinforcing self-concept in the face of threatening information (Sherman & Cohen, 2002, for further review of self-affirmation applied in a variety of contexts).

Self-affirmation manipulations reliably reduce defensiveness and promote meaningful and lasting behavioral changes (for reviews, see McQueen & Klein, 2006; Sherman & Cohen, 2006; Steele, 1988). In one study, 61 randomly assigned college students who completed an affirmation exercise prior to viewing an educational video about AIDS subsequently

reported increased perceptions of personal risk for HIV, decreased defensiveness in response to the video, and increased engagement in AIDS-preventive behaviors (e.g., purchasing condoms, taking AIDS educational brochures), compared to non-affirmed participants (Sherman, Nelson, & Steele, 2000). Another study found that when adult participants ($n = 278$) completed a self-affirming questionnaire (Reed & Aspinwall, 1998) or a self-affirming implementation intention (Harris, Napper, Griffin, Schuez, & Stride, 2011) prior to being presented with a threatening health message portraying the risks of alcohol consumption, they reported a significant decrease in alcohol consumption at the one month follow-up interview (both conditions were found to be equally effective) (Armitage, Harris, & Arden, 2011). Participants in the control group, who were exposed to the threatening health message and a control questionnaire, did not exhibit significant changes in alcohol consumption. In this particular experiment, participants who demonstrated behavioral changes engaged in the self-affirmation component and were presented with risk feedback (e.g., effect of alcohol consumption on the body).

For some clients, techniques such as cognitive restructuring in CBT may trigger defensiveness, particularly when examining deeply held core beliefs. Clients may feel their adequacy is threatened when asked to consider that their patterns of thinking may be flawed. Thus, self-affirmations offer a way to minimize defensiveness resulting from threats to self-esteem or self-identity. Prior to engaging in cognitive restructuring, clients can be asked to discuss one of their areas of personal strength or primary values. Ideally, this would be an area in which clients are experiencing some success and not the core issue being targeted through cognitive restructuring. This may decrease defensiveness and increase willingness to challenge distorted beliefs and make necessary behavioral changes.

In other therapeutic orientations, such as ACT and DBT, living in accordance with one's values is a foundational goal used to motivate behavior (Linehan, 2014; Wilson & Murrell, 2004), but self-affirmation has a function distinct from this goal. In addition to motivating behavior, self-affirmations bolster self-worth, which increases openness to threatening information, buttresses self-esteem, and reduces defensiveness and reactivity. Furthermore, self-affirmations do not necessitate a focus on one's values – they can instead focus on areas of personal strength or other subjects that reinforce the notion of the self as capable. Using self-affirmation as proposed here is simply one way to explicitly target self-worth as a defensiveness reducing technique to enhance the efficacy of traditional CBT techniques such as cognitive restructuring.

Self-Categorization Theory

Self-categorization theory (SCT; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) differs from many theories that propose multiple selves in that it proposes that self-definition occurs at multiple levels of generality (e.g., individual, group, human). That is, individuals do not possess a single, unified self-concept, but instead have multiple self-concepts that become salient in different contexts. At the group level, the origins of these self-concepts lie in identification with or distancing from a particular group. Once an individual identifies or self-categorizes into a specific group, SCT predicts they will naturally “depersonalize” and adopt the normative behaviors associated with that group (Hornsey, 2008). For example, if

an individual identifies with the group “teachers,” SCT proposes they are more likely to adopt stereotypical behaviors such as a softened tone of voice during class. Stereotypical attributes of the group are also internalized – teachers may view themselves as empathic, regardless of whether or not they are more empathic than average. This process of adopting stereotypical behaviors and attributes solidifies the group identification as an individual’s self-concept.

Several studies have shown support for SCT by showing different social perspectives can affect individual differences (for review, see Turner & Reynolds, 2011). One simple finding is that focusing on different social roles (e.g., father, employee) can influence personality self-ratings (Roberts & Donahue, 1994; Roberts and Caspi, 2003). The social reference of comparison can influence also personality self-ratings. Comparing one’s current self to others rather than to an earlier time in one’s life leads to a greater perception of personality traits as fixed rather than malleable (Guimond et al., 2007). Additionally, focusing on one’s membership to a (partially) negatively stereotyped social group can increase psychological symptoms such as depression and anxiety (Haslam & Reicher, 2006; Bizumic et al., 2009). Another study found that self-reported depression increased in European-Australians when asked to explicitly contemplate their non-Native-Australian identity (Reynolds et al., 2012). This research highlights the possibility for self-classification into social groups to influence one’s self-concept and psychological symptoms.

In therapy, the degree to which clients’ self-concepts are based upon identification with their psychiatric diagnosis may be relevant to their global functioning. Previous literature emphasizes the potential negative outcomes of labeling individuals as having severe mental illness and less severe emotional disorders (e.g., Rosenfield, 1997; Yen et al., 2005). Similarly, prior research has examined how public stigma about a psychiatric diagnosis can be internalized as self-stigma (e.g., Corrigan, Rafacz, & Rüsich, 2011), leading to diminished self-esteem and increased psychological symptoms (Corrigan, Watson, & Bar, 2006). According to SCT, if an individual identifies as a person with a psychiatric diagnosis, he or she is likely to adopt stereotyped behaviors (e.g., anxious pacing) or attributes (e.g., dependency on others). Internalization of a psychiatric diagnosis as a self-concept may be problematic if clients adopt expected maladaptive behaviors and/or cognitions, such as not being able to keep steady employment or viewing themselves as helpless. For example, if a person sees individuals with post-traumatic stress disorder (PTSD) as weak-willed and out of control, they may integrate those attributes into their self-concept if they experience a traumatic event and develop PTSD.

The saliency of a person’s diagnosis self-concept relates to psychological functioning. Some clients may experience their diagnosis as salient in the context of the therapy, which is to be expected given the direct emphasis on treating their presenting problem (e.g., depression). Some clients, however, may experience their diagnosis as salient in all aspects of their life – parenting, working, romantic relationships, friendships, recreation, spirituality – such that it overshadows other self-concepts and worsens psychological functioning. One strategy to reduce the saliency of clients’ psychiatric diagnosis for their self-concept is for clinical practitioners to boost the salience of other levels of their self-concept for self-definition. For example, clients can create an identity pie chart in which they progressively add slices for

different aspects of their identity. Clinicians could encourage clients to be inclusive such that “being a United States Citizen” or “graduating from college” or “never committing a violent crime” could all be potential slices. This might reduce self-stigma, labeling, and symptoms by increasing the saliency of the multitude of the client’s other self-concepts beyond their diagnosis self-concept.

Transference Reactions

Transference is the process by which a mental representation of a significant other from one’s past is activated and applied to different people (Anderson & Berk, 1998a). The concept of transference has primarily been applied to psychodynamically-oriented approaches to therapy (Freud, 1912/1958; Levenson, 1995), but has been largely ignored by cognitive-behavioral therapies (for exception, see Leahy, 2001; Prasko et al. 2010). Theorists have commented, however, that aspects of psychodynamic therapy are present in CBT and visa-versa (e.g., Stricker & Gold, 2013). Transference is consistent with a cognitive-behavioral approach when defined as a social-cognitive process rather than an unconscious, psychodynamic process (Anderson & Berk, 1998). For example, individuals develop relational schemas – the mental representations of social relationships – from past significant others (e.g., parents; Baldwin, 1992). Just as one’s current environment can activate self-schemas (Segal, 1988), one’s current relationships can activate one’s relational schemas. Although other terms are often used, schemas are at the root of CBT (Beck, 1991).

Social psychological research has demonstrated that transference is a phenomenon that occurs in daily life and within psychotherapy, including during non-analytic therapies such as CBT (Andersen & Berk, 1998a; Anderson & Berk, 1998b, Berk & Andersen, 2000; Gelfo & Bhatia, 2012). The social cognitive model of transference of Anderson and colleagues assumes relational schemas developed during prior relationships become activated in the context of transference. These relational schemas are mental representations of significant others including their expected social attributions, intentions, and behaviors that are stored in one’s memory. Transference can be triggered instantaneously, even toward strangers, when relational schemas are activated through manipulation of the person’s name or facial features to resemble individuals who have been significant in the past (Andersen, Glassman, Chen, & Cole, 1995; Glassman & Andersen, 1999; Hinkley & Andersen, 1996; Kraus, Chen, Lee, & Straus, 2010; Miranda & Andersen, 2010); individuals are biased to automatically infer that someone who superficially resembles someone (e.g., same name, similar facial features) from a past relationship will possess similar positive (or negative) attributes to this individual. Activation of relational schemas can lead to shifts in self-concept and feelings, such that individuals describe themselves more similarly to how they perceived themselves to be when in the relationships (e.g., high or low in worth, capability, or attractiveness). Thus, activation of relational schemas activates corresponding working views of the self. These simple experimental procedures also seem to activate schema-congruent affect and self-regulatory tendencies (e.g., rumination). Thus, tendencies towards excessive self-criticism (Shahar, 2015) are likely linked to activation of relational schemas in transference.

It may prove fruitful to be mindful of social psychological research on transference in the context of clinical practice. In addition to gathering the usual information, clinicians could

be alerted to potential transference effects, which could be occurring within the client's ongoing relationships as well as the therapeutic relationship itself. For example, by collecting information regarding the facial appearance and physical characteristics (e.g., heavy, tall), as well as names of individuals who have been influential in creating relational schemas, clinicians may be more mindful of how automatic activation of these may be influencing current relationships. Many clinicians outside of the psychodynamic tradition are not as alert to these transference processes, and certainly may not be cognizant of how instantaneously transference can activate attributional patterns, feelings, and coping or defensive styles simply on the basis of superficial facial or physical characteristics (e.g., having a similar facial expression). Prescriptively, clinicians could take direct steps to assess what individuals in important relationships looked like physically, as well as their names, and be more prepared to ask clients if there are ways that people they are currently engaged with "remind them physically or in some other way" of others with whom they had significant relationships in the past.

It is important to note that evidence is currently limited that transference interpretations themselves lead to symptom reduction (Hoglund, 2004). Transference can help clinicians and clients identify maladaptive relational schemas; however, insight may not be enough to alter the schemas. Other CBT techniques, such as cognitive restructuring, and behavioral experiments, may be necessary to actually change the schemas.

Embodied Cognition

Research in the area of embodied cognition has identified unique mechanisms through which the body can influence cognitions and emotions (Briñol & Petty, 2008; Williams, Huang, & Bargh, 2009). Such research has found considerable evidence that in addition to the mind influencing the body, the body impacts cognitions and emotions (for review see, Briñol & Petty, 2008; Niedenthal, Barsalou, Winkielman, Krauth-Gruber, & Ric, 2005). Studies have consistently found, for example, that manipulating the face into a smile results in individuals rating pleasant stimuli with increased positivity (Stepper & Strack, 1993; Soussignan, 2002). Conversely, a lack of smiling may increase negativity. Individuals with facial neuromuscular disorders that impair smiling reported more severe depression than those with more general facial impairments (Van Swearingen, Cohn, & Bajaj-Luthra, 1999). Thus, a lack of smiling, even due to physical impairments, may alter cognitions. One of the few therapeutic approaches that has successfully integrated these findings into treatment is DBT. For example, a skill intended to help individuals tolerate distressing feelings entitled "Half-Smile" encourages clients to adopt a relaxed, Mona-Lisa like smile in order to generate a serene mood (Linehan, 2014).

Studies of embodied cognition have found that physical postures can also alter cognitions. Riskind and Gotay (1982) expanded the above research by assessing how body posture may elicit similar cognitive shifts. In two studies, they found that participants who were placed in a slumped physical posture were quicker to develop helplessness than individuals who had been placed in an upright posture. Other studies have shown that particular postures can lead to particular emotional states (Duclos, et al., 1989). When placing individuals into a body posture of fear, anger, or sadness, participants reported heightened levels of the applicable

emotion. For instance, when participants were instructed to clench their fists tightly and lean forward and hold the position for 15 seconds, they reported experiencing higher levels of anger. Again, DBT has drawn upon these embodied cognition findings to inform the therapeutic technique. Through the “Opposite Action” skill, individuals are encouraged to act the opposite of their current emotion in posture, facial expression, and action, until the unpleasant emotion decreases (Linehan, 2014).

Researchers have also investigated the cognitive impact of either nodding or shaking one’s head. Briñol and Petty (2003) reported that in three distinct experiments, participants who nodded their head reported enhanced confidence in their own thoughts or the persuasiveness of an argument from someone else. Conversely, shaking their head side-to-side reduced confidence in their thoughts or another individual’s argument. Additionally, nodding or shaking of the head has been related to increasing (nodding) or decreasing (shaking) a participant’s preference for diverse stimuli such as music or neutral objects (Tom, Pettersen, Lau, Burton and Cook, 1991; Wells & Petty, 1980; Epley & Gilovich, 2001).

Studies of embodied cognition have also shown that sensorimotor experiences less obviously associated with emotions can also alter cognitions. In one study, participants who held a heavy clipboard judged an issue as more important than did those who held a light clipboard (Jostmann, Lakens, & Schubert, 2009). In a study conducted by Briñol and Petty (2003), confidence and self-esteem were influenced by the hand participants wrote with. While writing with their dominant hand, participants were more confident in the thoughts they wrote down than when they wrote the thoughts with their non-dominant hand. Participants also reported greater confidence in having strong qualities (i.e., desirable traits) when writing with their dominant hand in comparison to writing with their non-dominant hand.

Further research is needed to determine whether embodied cognition manipulations could be of benefit in altering cognitions and emotions in CBT. CBT may have already inadvertently begun to integrate embodied cognition through relaxation techniques. For example, progressive muscle relaxation is meant to induce calm and mental relaxation through releasing tension in the muscles. However, use of such embodied cognition techniques is still in its relative infancy, and future years may become more sophisticated and systematic in using body manipulations in CBT or other forms of psychotherapy.

In order to purposefully build on the abundance of embodied cognition research, it may prove fruitful to apply some of the experimental manipulations in previous studies in the clinical setting. For example, encouraging clients to nod or shake their heads while discussing their thoughts might be helpful in heightening or altering conviction in adaptive (or maladaptive) thoughts and beliefs. If a client is working to dispute an automatic thought through CBT skills, nodding their head while stating a more adaptive thought may increase their confidence in the thought. Similarly, current treatments for clients struggling with social anxiety help clients shift their posture to be more upright and confident (Albano & DiBartolo, 2007). This could be conceivably expanded upon and taught as an adjunctive skill for other established, manualized CBT treatments.

Conclusion

The current article seeks to encourage formal integration of recent advances in social psychology in clinical science and practice, using CBT as an exemplar. To this end, we have identified several novel ways to integrate several recent advances in social psychological theories and research into clinical psychology in order to enhance the effectiveness of treatment. Given the varying and often disparate clinical approaches, this paper focuses on cognitive factors – such as the self-concept – that are central to many therapeutic modalities. Integrating recent principles and approaches from social psychology is one way to improve the effectiveness of these therapeutic approaches. The theories and examples provided are not intended to be exhaustive, but as illustrations of how this social-clinical integration can be further achieved. Other rich veins for new ideas to integrate into clinical psychology include work on basic cognitive and decisional processes (Kahneman, 2011), self-control (Baumeister et al., 2007; Duckworth, Gendler, & Gross, 2016), resilience (Bonano, 2004; Masten, 2001), emotion regulation (Gross, 1998), and implicit attitudes (Greenwald et al., 2002), among many others. To better facilitate change, we encourage clinicians and researchers to draw upon psychological sub-disciplines outside of their own and social psychology offers a fertile source of material for enrichment of clinical work and theory.

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