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I-SHARING IN THE CLINICAL CONTEXT: THE IMPACT OF
SHARED SUBJECTIVE EXPERIENCE ON RATINGS OF THE
THERAPEUTIC ALLIANCE IN A BRIEF SIMULATED INTERVIEW

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Psychology

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A strong body of social psychology literature indicates that I-sharing, or the perception that one has shared an identical subjective experience with another person, contributes to increased feelings of connectedness, liking, and prosocial behavior in relationships (Pinel & Long, 2012). Recent theorizing suggests that I-sharing may be of clinical utility as a tool to support the development of the therapeutic alliance (Pinel, Bernecker, & Rampy, 2015). This study serves as an experimental follow-up to that paper and explores the impact of an in-vivo I-sharing manipulation on ratings of therapeutic alliance, liking, perceptions of therapy, helping behavior, and existential isolation following a brief simulated clinical interview. Forty-two students enrolled in an introductory psychology course at a midsize university in Western Pennsylvania volunteered to participate in the research. Participants were randomly assigned to an I-sharing or no I-sharing condition, where I-sharing was operationalized using an in-vivo modification of the Ink Blot task utilized in Huneke & Pinel's (2016) previous I-sharing research. Following completion of the task, participants engaged in a brief interview to simulate a clinical encounter. Videos of the interviews were reviewed to assess for consistency in the interviewer's behavior between study conditions. Significant differences in ratings of liking and helping behavior emerged, such that individuals in the no I-sharing condition rated the interviewer as more likeable and were more willing to engage in helping behavior than those in the I-sharing condition. Video review showed significant differences in ratings of the

interviewer's behavior between conditions, where the interviewer was perceived more favorably in the no I-sharing condition. Though no differences in ratings of the therapeutic alliance or perceptions of therapy emerged, there was a significant decrease in existential isolation from pre-interview to post-interview, and ancillary analyses revealed gender differences in baseline levels of existential isolation. Existential isolation was found to be a marginally significant predictor of ratings of the therapeutic alliance, which is consistent with recent findings on the negative relationship between existential isolation and attitudes regarding psychotherapy (Constantino, Sommer, Goodwin, Coyne, & Pinel, 2019). The results of this study are discussed within the context of informing clinical practice and bridging social and clinical psychology research.

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CHAPTER 1

STATEMENT OF THE PROBLEM

Scholars and practitioners have long debated the most effective means of change in treating mental health conditions. Nearly seventy years of outcome-driven research fails to identify any one method of psychotherapy, or specific therapeutic technique, as consistently superior to the others, and instead demonstrates that the various approaches to psychological treatment are more alike than unlike (Norcross & Lambert, 2011). Specifically, psychotherapy outcome research suggests that the relationship between the client and his or her therapist is among the most critical factors in predicting response to treatment (Norcross & Lambert, 2011; Del Re, Fluckiger, Horvath, Symonds, & Wampold, 2012). Though there is general consensus that this relationship, often referred to as the “therapeutic alliance,” is of considerable importance in psychotherapy, the construct is not universally defined. This presents a major challenge to scholars seeking to quantify the exact impact of the alliance on treatment as well as to clinicians hoping to capitalize upon strategies for reinforcing the alliance. Preeminent researchers studying the client and therapist factors involved in psychotherapy maintain that accurate empathy, positive regard, nonpossessive warmth, and congruence are central to the development of an effective therapeutic alliance (Hubble, Duncan, & Miller, 1999; Norcross & Lambert, 2011). The client’s perception of the therapist’s empathy in particular is shown to directly impact the effectiveness of psychotherapy, regardless of the clinician’s theoretical orientation (Bohart & Greenberg, 1997; Elliot, Bohart, Watson, & Greenberg, 2011; Hubble, Duncan, & Miller, 1999; Rogers, 1995). Though the exact processes by which the therapeutic alliance impacts client progress in psychotherapy have not yet been delineated, it is clear that therapy is an inherently relational process. As such, the study of clinical psychotherapy lends itself well to the inclusion

of concepts outlined in social psychology research, which is focused on both the individual and contextual determinants of social behavior (Fiske, 2014). However, fundamental differences in the assumptions underlying social psychology and clinical psychology have historically contributed to divisions between clinical and social psychology research, which arguably inhibits the creation of comprehensive theories of behavior change, the appreciation of the interaction between intrapersonal and interpersonal factors in mental health, and the clear understanding of the role of the therapeutic alliance in psychotherapy outcomes (Leary & Maddux, 1987; Pinel & Constantino, 2003 as cited in Pinel, Bernecker, & Rampy, 2015; Snyder & Forsyth, 1991).

With the growing emphasis on integrated care and holistic health over the past twenty years, clinical and social researchers have made strides in the incorporation of social psychology and clinical psychology constructs into more unified conceptualizations of individual health and wellness (Snyder & Forsyth, 1991). Pinel, Bernecker, and Rampy's (2015) paper on the role of shared subjective experience, referred to as *I-sharing*, in psychotherapy serves as one such example of how social psychology concepts may work to enhance the understanding of clinical phenomena. The notion of shared subjective experience has its roots in the work of William James and is based upon a distinction he made between the objective self or "Me," which is a repository that contains everything a person knows about herself, and the subjective self or "I," which actively perceives, interprets, experiences, and reacts to all of the stimuli the self encounters (James, 1918; Pinel, Long, Landau, & Pyszczynski, 2004). I-sharing happens when a person perceives that her subjective self has overlapped with another person's subjective self, because the two have shared an identical perception, interpretation, experience, or reaction. I-sharing experiences tend to be rare, because a person's present experience of a given stimulus is entirely subjective and individualistic in nature. Moreover, people's existential isolation makes

it very difficult to know whether another person's subjective experience truly matches their own (Yalom, 1980). I-sharing allows people to overcome that existential gap, making I-sharing a unique phenomenon that is purported to facilitate a sense of connectedness that cannot be achieved through the sharing of objective facts (i.e., Me-sharing) alone (Pinel et al., 2004). *Me-sharing*, or similarity of objective traits between at least two individuals, is believed to play a role in group dynamics (Heider, 1958; Sherif et al., 1961), prejudice and stereotyping (Allport, 1954), attraction (Berscheid & Reis, 1998) and liking (Pinel et al., 2004), but I-sharing has been shown to supersede the impact of Me-sharing, such that individuals are more likely to prefer someone with whom they have I-shared than someone with whom they Me-share (Allport, 1954; Byrne, 1971; Pinel et al., 2004; Pinel et al., 2006).

Pinel and her colleagues (2015) maintain that the facilitation of I-sharing between a client and his or her therapist may be an integral component of the formation of an effective working relationship marked by understanding, empathy, and support. Drawing upon the strong tradition of experimental social psychology research, the paper cites a body of literature emphasizing the contribution of I-sharing to interpersonal connection, positive relationship behaviors, decreased feelings of existential isolation, and improved social functioning in relationships beyond the initial experimental encounter (Pinel, Bernecker, & Rampy, 2015; Pinel et al., 2004; Pinel, Long, & Crimin, 2010; Pinel & Long, 2012; Pinel, Long, Landau, Alexander, & Pyszczynski, 2006). The authors reference clinical psychology research in the domains of the therapeutic alliance, empathy, nonverbal mirroring, therapist self-disclosure, and interpersonal mindfulness to suggest that the positive intrapersonal and interpersonal effects of I-sharing may extend beyond the experimental setting and could function as a useful explanatory, and advisory, mechanism in evaluating the role of the therapeutic alliance in psychotherapy outcomes.

The current study sought to function as an experimental follow-up to Pinel and colleagues' (2015) review of the potential benefits that may arise from the application of I-sharing to clinical encounters. The importance of a strong alliance in predicting psychotherapy outcomes is well established (Horvath, Del Re, Fluckiger, & Symonds, 2011; Hubble, Duncan & Miller, 1999), as is the link between shared subjective experience and the facilitation of positive interpersonal interactions (Pinel et al., 2004; Pinel & Long, 2012; Pinel, Long, Johnson, & Yawger, 2018). This research aims to expand upon existing I-sharing manipulation paradigms in an effort to create the experience of I-sharing within a simulated clinical encounter, with the ultimate goal of evaluating whether shared subjective experience impacts ratings of the therapeutic alliance.

CHAPTER 2

REVIEW OF THE LITERATURE

The Social Clinical Interface

In order to fully appreciate the theoretical underpinnings of I-sharing, as well as the potential clinical applications of the construct, it is important to recognize the differing assumptions that have historically contributed to the division between social and clinical psychological research. The two subspecialties developed during approximately the same time frame, with advances in each field largely spurred on by the need for more nuanced understanding and prediction of human behavior during and following WWII (Snyder & Forsyth, 1991). While the advent of psychological testing, and increased need for mental health practitioners after the Second World War, facilitated clinical psychology's transition from a research-based discipline into an applied science, social psychology remained largely research-focused with an emphasis on understanding social conflict and the bases of social behavior (Leary & Maddux, 1987; Snyder & Forsyth, 1991). Traditionally, the study of social psychology has been concerned with the intrapersonal and interpersonal factors that contribute to social behavior, while the practice of clinical psychology has been interested in identifying and treating dysfunctional behavior (Snyder & Forsyth, 1991).

Over the past fifty years, several attempts have been made to bridge the divide between clinical and social psychology, but the notion of the "social-clinical interface" did not fully take hold until the early 1990s; the integration of the two fields largely paralleled the shift in the medical community's focus from a model of physician as technician to a more patient-centered practice that emphasizes both interpersonal and intrapersonal contributors to overall health and well-being (Snyder & Forsyth, 1991; Golin, Thorpe, & DiMatteo, 2008). Models of

psychological functioning, and subsequent dysfunction, increasingly recognize social factors as important mechanisms by which maladaptive mental health patterns may develop. For instance, Interpersonal Therapy, an evidence-based treatment for Depression, places substantial emphasis on the role of impaired interpersonal functioning in the onset and maintenance of depressive symptoms (Markowitz & Weissman, 2004). Belongingness needs, social interaction patterns, and the perception of self-efficacy, all of which traditionally fall under the purview of social psychology, have been shown to impact a variety of clinical presentations including suicidality (Joiner et al., 2009), the transition from Acute Stress Disorder to Post-Traumatic Stress Disorder (Solomon, Avitzur, & Mikulincer, 1989), and Depression (Hames, Hagan, & Joiner, 2013), to name a just a few.

This literature review attempts to model the structure of the social-clinical interface by first presenting the social psychological bases of I-sharing, followed by a review of specific findings related to the manipulation of I-sharing in social psychology research settings. This section then transitions into a review of the aspects of psychotherapy that I-sharing may impact, before ultimately summarizing the overall findings, identifying the methodology and research questions of interest in this study, detailing the findings specific to this research, and providing a discussion of future directions and applications to clinical practice.

Defining I-Sharing

I-sharing is most clearly defined as the subjective sensation that one has had the same in-the-moment experience as one or more other individuals (Pinel, Bernecker, & Rampy, 2015). Simply put, in instances of I-sharing, an individual believes that he or she and another person are having an identical subjective reaction to a stimulus. Common examples of I-sharing cited in the literature include saying the same thing at the same time as another individual, displaying the

same affective expression as a partner (such as smiling or laughing at the same time), and engaging in an identical behavior in response to a stimulus (such as dancing to the same song or cheering at the same point in an athlete's performance or a politician's speech) (Pinel et al., 2006). In his groundbreaking psychological text, William James (1918) identified that one can never truly know the in-the-moment experience of another. This concept is expanded upon within Yalom's (1980) conceptualization of "existential isolation," or the inability to fully know another person. The separation between what can be known about a person, and what that person experiences as a subjective "knower", is the foundation of the I-sharing construct, and is further reviewed in the sections to follow. When we I-share with someone, we temporarily suspend the gap between "them" and "us" allowing for validation of our own experience through connection with another person who is presumed to be having an identical experience (Pinel et al., 2004).

Because we are existentially isolated from others, and we cannot directly observe another person's experiences, the perception that one has I-shared with another person is also subjective in nature. Pinel and colleagues (2004) maintain that because I-sharing is an inference, an individual needs only to believe that he or she is experiencing the same stimulus, in the same way, at the same time, as another person in order to perceive that I-sharing has occurred. The phenomenon cannot ever be objectively captured because the private and internal responses of another person can never truly be known. As such, I-sharing is an inference, and the belief that one has I-shared with another person is largely based on cues from that individual indicating an identical response (Pinel et al., 2006).

Pinel and her peers (2004) suggest that I-sharing is most likely to occur when responses to a given stimulus are both simultaneous and identical. When individuals share the same reaction at the same time to a certain cue, they are likely to infer that they are I-sharing (Pinel et

al., 2004; Pinel et al., 2006). If a lag exists between one individual's response and that of the other(s), I-sharing is less likely to be inferred (Pinel, Long, & Huneke, 2015). The literature on synchrony and mimicry suggests that interactional synchrony fosters dyadic rapport and positive affect in paired interpersonal interactions (Bernieri, Reznick, & Rosenthal, 1988; Tickle-Degnen & Rosenthal, 1990; Chartrand, Maddux, & Lakin, 2005). Synchrony has also been identified as a behavioral representation of "connectedness" between two individuals (Ickes, Stinson, Bisonette, & Garcia, 1990). When this research is applied within the context of I-sharing, it becomes clear that the synchrony of response (e.g. simultaneousness) is part of the behavioral information that allows for the inference that I-sharing has occurred (Pinel, Long, & Huneke, 2015; Pinel et al., 2006).

Theoretical Framework Underlying I-Sharing

William James's (1918) distinction between the objective ("Me") and the subjective ("I") components of the self is the foundation of the I-sharing construct (Pinel et al., 2004; Pinel, Bernecker, & Rampy, 2015; McAdams, 2013). Within James' conceptualization, and subsequent interpretations of his work, the "Me" is understood to include all information that a person knows about herself, as well as the views that he or she holds of him or herself (Gecas, 1982; Pinel et al., 2004). Also referred to as the "self-concept," the Me is comprised of an individual's characteristics, values, beliefs, hobbies, history, memories, and more (Pinel, Bernecker, & Rampy, 2015). Although the Me may be altered throughout an individual's life as his or her characteristics change (e.g. an individual may develop new tastes, habits, or even physical attributes over time), the content of the Me is largely stable (Pinel et al., 2004; Gecas, 1982). The I, on the other hand, is in a constant state of flux as it perceives, interprets, experiences, and reacts to the ever-changing stimuli it encounters (James, 1918; Pinel et al., 2004). Moreover,

because of the impossibility of setting aside the existential gap between individuals, the content of the I cannot be directly observed by another individual, and therefore remains unknowable to those with whom we interact (James, 1918; Pinel et al., 2004). Though the I and the Me are distinct components of the self, the two interact seamlessly, such that an individual perceives the Me through the I, as Pinel et al. (2004) cleverly illustrate through the example of an individual observing his or her reflection in the mirror, where the image reflected in the mirror is the Me and the consciousness through which the image is interpreted is the I.

Objective Self-Awareness

Objective self-awareness involves turning inward and reflecting upon what is known about the self (Fiske, 2014). Duval & Wicklund's (1973) Self-Awareness Theory posits that when individuals are faced with discrepancies between their "idealized self-concept" and their objective self, they experience emotional distress and are subsequently motivated to alter their behavior in order to preserve their self-esteem. Inconsistencies between the ideal self and actual self are highlighted when individuals are forced to examine their behavior objectively, such as through video clips, mirror image, or voice recordings (Gecas, 1982). People tend to avoid situations that provoke this type of self-reflection because of the discomfort it invokes and the subsequently negative impact on their self-esteem. As individuals become more self-aware, they also become increasingly self-evaluative and through this awareness become their "own source of self information" (Morin, 1993). Writing about this self-evaluation process, Scheier and Carver (1977, 1978) suggest that when an individual is in a state of increased self-awareness, the affective salience of his or her subjective experiences intensifies. In other words, as the I focuses in on the observable aspects of the Me, the conscious experience of the I becomes increasingly poignant. This discomfort motivates changes to move the self closer to the idealized self-

concept, or, if that is not possible, to escape self-awareness, ultimately resulting in a stabilization of state self-esteem (Duval & Wicklund, 1973; Scheier & Carver, 1981). Research suggests that individuals who are forced to enter a state of objective self-awareness will make efforts to return to subjective self-awareness, sometimes via maladaptive means (Moskalenko & Heine, 2003). Impulsive behaviors, including gambling, shopping, binge eating, substance use, and self-harm are associated with negative affectivity in the objectively self-aware state, and are viewed as attempts to direct one's awareness away from discrepancies between the actual self and the ideal self (Baumeister, 1991; Duval & Wicklund, 1973).

Subjective Self-Awareness

In contrast to the self-evaluative process involved in objective self-awareness, when individuals enter a state of subjective self-awareness, their attention is directed away from the observable self and is instead focused on their present experience. Subjective self-awareness allows the individual to act as the observer of his or her world rather than as an observer of him or herself (Moskalenko & Heine, 2003). Individuals often achieve this state when they are actively engaged with an environmental stimulus or experience, particularly when the task or activity requires concentration, control, and concerted effort (Nakamura & Csikszentimihalyi, 2014). "Flow states," or periods of activity that require complete focus and attention to the task at hand, are known to induce subjective self-awareness (Csikszentimihalyi, 1990). A state of flow is most likely to be achieved when there is a balance between the difficulty of the task and the individual's skill level, prompting the experience of being completely in tune with the behavior. Similarly, mindfulness, which emphasizes awareness and present acceptance of one's in-the-moment experience, is linked to the induction of subjective self-awareness and a wide range of psychological health benefits (Keng, Smoski, & Robins, 2011).

Whereas objective self-awareness is generally associated with a negative affective state, subjective self-awareness is the individual's preferred state of being and is associated with feelings of internal control (Duval & Wicklund, 1973). When left to their own devices, individuals favor subjective self-awareness and the role of self-as-subject rather than self-as-object; this preference for subjective self-awareness sets the precedent for why I-sharing is such a powerful phenomenon, as I-sharing with another person detracts from the experience of the self as an object and fosters feelings of connectedness, control, and support (Baumeister, 1991; Nakamura & Csikszentimihalyi, 2014).

Distinguishing I-Sharing From Related Constructs

In order to understand what I-sharing *is*, it is essential to understand what it *is not*. The distinction between objective self-awareness and its relation to observing the *Me*, and subjective self-awareness and its relation to experience as the *I*, helps to set this framework. Further concepts that must be delineated from I-sharing include the closely related constructs of “shared reality,” “shared social identity,” “self-verification,” and “the implicit self.”

The notion of shared reality proposes that individuals are in consensus on the perception of the experience that was shared between them (Hardin & Higgins, 1996; Echterhoff, Higgins, & Levine, 2009). I-sharing is understood to represent a very specific form of shared reality involving the sharing of an in-the-moment subjective experience. For I-sharing to occur, an individual must believe that he or she has shared an identical subjective experience with another person (e.g., we both gasped when Darth Vader revealed that he is Luke Skywalker's father, thus we experienced it in the same way). For shared reality to occur, individuals must agree about their perception of events but not the subjective experience of those events (e.g. we are in consensus that you gasped when Darth Vader revealed that he is Luke Skywalker's father, but I

remained neutral). In the former example, the individuals infer that they are having the same conscious experience because of their simultaneous shared response. In the latter example, the individuals agree on what the responses were without drawing inferences about shared experiences.

I-sharing is also distinct from “shared social identity,” a form of Me-sharing, for similar reasons. Social identity theory posits that individuals derive a sense of their own self-concept from membership and inclusion in a particular group, and that their behavior is driven by attitudes and values common to that group (Tajfel, 1974; Rokeach, 1973). It is common for individuals who share a social identity to also experience instances of shared reality based in shared values, attitudes, and emotions (Hogg & Rinella, 2018). For example, research evaluating feelings of support among individuals who identify with the shared social identity of “refugee” demonstrates that individuals derive a sense of comfort from their collective identity and perception that they subsequently share a common trajectory for their lives (Alfadhli & Drury, 2018). This is an example of how shared social identity may foster the consensus on experience that is seen in shared reality (Echteroff, Higgins & Levine, 2009). What sets I-sharing apart from other forms of similarity, including shared social identity, is its emphasis on identical, in-the-moment, subjective experiences. We are never closer to another person than we are during an instance of I-sharing; for a moment, we transcend the gap of “unknowing” that prevents us from being able to “walk in another person’s shoes” and we perceive that we are having an identical experience. This provides validation of our own experience and a strong connection to the person with whom we are I-sharing (Pinel et al., 2006; Pinel, Long, & Crimin, 2010). Shared social identity provides validation of experience through sharing the Me, rather than specifically

through identical, conscious, in-the-moment experience of the I (Hogg & Rinella, 2018; Pinel et al., 2004).

Self-verification is another social psychological construct that is related to, but entirely distinct from, I-sharing. Self-verification theory maintains that people desire for others to view them the same way that they view themselves, even if their self-appraisal is negative (Swann, 2012). This preference can be linked to individuals' desire for predictability in their environments, clear expectations in social interactions, and confirmation of their self-views. People feel validated in their perception of themselves and in their self-concept when their self-views are verified by others (Swann, 2012). Once again, the construct of self-verification relates to experiences of the objective self rather than the subjective self. For instance, an individual might hold the view that she is athletic, an objective characteristic. Within the framework of self-verification theory, this individual would prefer for others to appraise her in the same way. This desire for verification of her self-view could even drive the individual to seek out social contexts, such as participation in group sports activities, where her self-view is more likely to be confirmed (Swann, 2012). Social others can provide self-verification for this individual by confirming that they view her as athletic, without sharing any conscious in-the-moment experiences with her. This is verification of the Me rather than confirmation of the I.

Finally, researchers who examine the dual self and its implications for social interaction are careful to emphasize the distinction between the I, or self-as-subject, from other similar constructs in self-psychology, such as the *implicit self*, which concerns the aspects of the self that occur at a level below consciousness (Devos & Banaji, 2003; Pinel et al., 2004). Though an individual is not capable of describing his or her I directly, as the theory would posit that the I is the source of that metacognition, the experiences of the I can be described at the conscious level

after they have occurred, which differentiates the I from any unconscious components of the self (Pinel et al., 2004). The inability to effectively capture the in-the-moment experience of the I leads to difficulty defining and measuring the construct empirically; as a result, the bulk of social psychology research on the self is focused on the observable Me (Pinel et al., 2004). Though the Me and the I are distinct entities within the self, Me-related research helps to inform our understanding of the I because the objective self is appraised through the lens of the subjective self. After we have an experience, we reflect upon it, and that information becomes part of the Me.

Existential Isolation

The notion that there are aspects of the self that cannot truly be known to another individual is central to James' distinction between the I and the Me. Where the Me has been defined as the self-as-known, the I serves as the self-as-knower (Pinel et al., 2004). No one person is able to observe the world through another person's sensory and cognitive lenses, which makes it impossible for one individual to directly observe another individual's experience (Pinel et al., 2004). Though the unknowable nature of experience and sensation may contribute to a person's sense of identity and individuality, it also serves as a force that separates us from those with whom we interact. This isolating force is theorized to create considerable tension and distress when it is reflected upon or encountered directly, and is included among the four primary existential concerns that individuals face (Pinel et al., 2004; Yalom, 1980).

Yalom's theory of existential psychotherapy posits that all humans are faced with four fundamental concerns that transcend all other individual struggles: death, freedom, isolation, and meaninglessness. These concerns are referred to as "existential threats" and are considered "givens," as no living individual is immune to the negative psychological effects of these events.

Humans are motivated to avoid these threats, often at the expense of their emotional, spiritual, mental, and physical health (Yalom, 1980). Existential psychotherapy is based on the premise that encountering these threats head-on allows individuals to achieve a sense of peace and understanding with their experiences, such that individuals are prepared to accept the realities of human existence without distress. A comprehensive exploration of existential theory is beyond the scope of this review (for a detailed account see Yalom, 1980), but understanding the threat of isolation, and its implications for human behavior, is essential in order to appreciate the power of I-sharing in social interactions (Pinel et al., 2004).

Yalom's conceptualization of isolation takes three forms. He identifies interpersonal isolation, intrapersonal isolation, and existential isolation as distinct phenomena, any one of which may create distress in the individual, thus prompting him or her to seek psychotherapeutic treatment (Berry-Smith, 2012). Interpersonal isolation is most closely aligned with the common-place term "loneliness." When we are unable to form meaningful relationships with others, we feel isolated from the world around us. Intrapersonal isolation functions on a more intrapsychic level, in that it involves the expression of an uncohesive self, where aspects of one's identity are repressed or ignored (Berry-Smith, 2012; Yalom, 1980). The final form, existential isolation, or the inability to truly know another person and to be known by them, is the most salient form of isolation to the I-sharing construct. When describing existential isolation Yalom (1980) writes:

No matter how close each of us becomes to another there remains a final unbridgeable gap; each of us enters existence alone and must depart from it alone. The existential conflict is thus, the tension between our awareness of our absolute isolation and our wish to be part of a larger whole.

This separation from those with whom we are seeking to interact is the basis of why I-sharing is so powerful (Pinel et al., 2004). Relationships serve as our only means of combating feelings of existential isolation; as such, we derive important information from these unions. Chiefly, we use relational information to develop a sense of the extent to which our own experiences are valid, as well as to form connections with others (Berry-Smith, 2012; Pinel et al., 2004). Research suggests that individuals higher in trait levels of existential isolation are less likely to have their psychological needs met, including the aforementioned need to “know” and need to “belong” (Pinel, Johnson, & Grover, 2014 as cited in Pinel, Bernecker, & Rampy 2015). Individuals higher in existential isolation are also higher in depression and anxiety, and report lower ratings of physical health (Long, Pinel, Park, Costello, and Daily, 2019). This reinforces the notion that I-sharing can serve as a powerful tool to support need fulfillment, and provides an indication as to why I-sharing is such a powerful experience.

Belief Validation

Pinel and colleagues (2004) posit that because of the ambiguity of our subjective world, we seek out others who experience the world in the same way we do as a source of validation. People are motivated to understand their abilities and to know the extent to which their experiences are “normal” and “real.” When objective means of comparison are not available, such as in the case of examining a subjective experience, individuals rely on information they glean from comparing themselves to others in order to fulfill their need to “know” (Festinger, 1954; Kelly, 1955; Swann, 1996). As such, I-sharing creates the sensation that others perceive a stimulus the same way that individual does, which reinforces the validity of the individual’s experience and the degree to which that individual conceptualizes his or her experience as contextually appropriate (Pinel et al., 2004). As was noted in the initial description of the I-

sharing construct, the perception that one has I-shared with another is in and of itself a subjective experience. There is no way to confirm that another person's experience really was identical to one's own experience, but the perception of having shared an identical subjective experience is enough to foster a sense of understanding, confirmation, and belief validation to meet the individual's need to "know" (Pinel et al., 2004; Pinel, Johnson, & Grover, 2014 as cited in Pinel, Bernecker, & Rampy, 2015).

Belongingness

In addition to acting on existential isolation by fulfilling our "need to know," I-sharing also satisfies our drive to achieve interpersonal connectedness (Pinel et al., 2004). The discussion of the innate desire for human connection is a central point in social psychology research. The very premise of social psychology as a discipline is founded upon understanding the interpersonal and intrapersonal processes that facilitate social behavior (Fiske, 2014). As such, the concept of connectedness makes an appearance in a number of preeminent social psychological theories, although at times under different names. Self-determination theory (Deci & Ryan, 2000), attachment theory (Bowlby, 1969), social conformity theory (Asch, 1951), theories of group dynamics (Berscheid & Reis, 1998), and attraction theory (Byrne, 1971) all recognize the powerful impact that human connection, or the lack thereof, can have on an individual.

The need for meaningful connections with others, often referred to as belongingness, is well documented as a defining aspect of the human experience. Throughout history, key psychological figures, from Freud to Maslow, have recognized the salience of belongingness, attachment, and connectedness to adaptive functioning (Baumeister & Leary, 1995; Bowlby, 1969). Preeminent I-sharing researchers maintain that the process of relating to another person

via a shared subjective experience generates greater feelings of connectedness and belonging than the process of social acceptance does alone (Pinel et al., 2004). This assertion is made on the basis that mere exposure to social situations, involvement in a group, or frequent interactions of an interpersonal nature are less rewarding than meaningful, long-term contact with one individual (Baumeister & Leary, 1995). Moreover, Yalom notes that the quantity of an individual's interpersonal experiences is of little use in evaluating his or her risk for experiencing existential isolation, as social involvement with others who are not meaningfully connected to the individual may actually contribute to greater feelings of existential isolation than those generated by being physically alone (Pinel et al., 2004; Yalom, 1980).

Baumeister and & Leary's (1995) theory of belongingness as a fundamental human motivation provides a useful framework for understanding the process by which I-sharing may foster feelings of interpersonal connectedness. The authors argue that humans are motivated, on a biological level, to initiate and sustain meaningful relationships. Relationships that fulfill this drive involve frequent positive interactions, are stable over time, and are characterized by genuine care and concern for the involved parties' wellbeing (Baumeister & Leary, 1995). While a major tenet of this theory is the frequency of interaction, the authors note that social contact alone does not buffer against feelings of loneliness, and perceived loneliness is theorized to relate more to a lack of connection than a lack of contact. The need to belong is presumed to support "cognitive merging" of one individual's self with that of another, such that they experience the world together through the same lens (Baumeister & Leary, 1995). As such, it stands to reason that during incidences in which individuals are able to bridge the gap of "unknowing" that exists between them by sharing in an identical and simultaneous reaction to a stimulus, they will not only feel validated in their experience, but will also feel more connected

to the person they are sharing the experience with (Pinel et al., 2004). I-sharing enables this “cognitive merging” to occur instantaneously as the individuals involved perceive that they are experiencing the world in the same way at the same time, thus allowing two I’s to become a “We” (Bauer & Wayment, 2008; Baumeister & Leary, 1995; Pinel et al., 2004; Wegner, 1987).

The theoretical assertions about the role of belongingness as a motivator for human behavior share several commonalities with Bowlby’s (1969) Attachment Theory. The basic premise of Attachment Theory maintains that individuals require a stable relationship with their primary caregiver in order to engage in adaptive socioemotional functioning into adulthood. Bowlby (1969) and other attachment researchers (Ainsworth & Bowlby, 1991) suggest that emotional regulation, internal representations of relationships, and expectations for future social interactions are largely derived from early relational experiences. While Baumeister and Leary’s belongingness theory also holds that meaningful connections are essential for an individual’s psychological well-being, the theory departs from the attachment literature in that the motivational quality of the “need to belong” is presumed to exist across all relationships, not just those with one’s primary caregiver. Additionally, where Attachment Theory provides descriptive indicators for an individual’s style of relating and predicts adaptive functioning based on attachment style, the theory of belongingness as a motivator serves to explain the impact of belongingness needs as a whole on an individual’s functioning (Baumeister & Leary, 1995). Nonetheless, both theories demonstrate the critical importance of belongingness to an individual’s overall health and provide a rationale for why incidences that promote feelings of connectedness are so meaningful.

Social exclusion and thwarted belongingness have been linked to increased suicidality, aggression, risk-taking behavior, negative mood ratings, and feelings of meaninglessness, as well

as decreased self-regulation, intelligent thought, and ratings of control (Baumeister, Brewer, Tice, & Twenge, 2007; Baumeister & Leary, 1995). A lack of meaningful connections with others further exacerbates an individual's inherent state of existential isolation by bringing the threat of isolation into conscious awareness. Pinel et al. (2004) maintain that I-sharing works to circumvent existential isolation by creating moments of perceived understanding and connection between two or more individuals, which creates a powerful bond based in our need to view our experiences as valid, as well as our drive to feel that we are not alone.

Similarity and Attraction

While much of this review is focused on the theoretical underpinnings of I-sharing, our understanding of I-sharing's influence on human behavior is also informed by research on Me-sharing, or objective similarity. Similarity is just one of five primary principles identified in social psychology literature as contributing to interpersonal attraction. Other principles include proximity, familiarity, reciprocity, and perception of physical attractiveness (Berscheid & Walster, 1974; Dion, Berscheid, & Walster, 1972; Luo & Zhang, 2009; Segal, 1974; Byrne & Griffitt, 1973). While each of these principles offer meaningful contributions to the understanding of how liking and attraction are fostered within interpersonal relationships, similarity and physical attractiveness are among the most heavily researched and are demonstrated to have the strongest correlations with ratings of attraction (Fiske, 2014; Montyoya & Horton, 2013).

Traditionally, social psychology research on similarity, liking, and attraction has emphasized the impact of commonalities in self-concept on individuals' relationships with one another, where objective similarity on a wide variety of dimensions is associated with increased positive relations between individuals (Berscheid & Reis, 1998; Brewer, 1991; Buss & Barnes,

1986; Byrne, 1971). The similarity and attraction literature predates I-sharing research, and the substantial research base indicating that similarity of many types leads to attraction supports the prediction that a newly identified type of similarity – I-sharing – would also increase attraction.

I-sharing work also helps to inform our conceptualization of the existing literature on (objective) similarity and attraction. In particular, Me-sharing may lead to liking at least in part because individuals may view similarities in self-concept as an indication that they are more likely to I-share with a particular person (Pinel et al., 2006). In this way, I-sharing may serve as a mediator in the relationship between similarity and liking, which has been firmly established in social psychology literature. Part of the appeal of objectively similar others may be the perception that these individuals are more likely to share subjective experiences with us as well, thus contributing to increased positive feelings about the relationship (Pinel et al., 2004; Berscheid & Reis, 1998). Research examining this notion suggests that Me-sharing and I-sharing have a correlation of approximately .5, providing some evidence to support the suggestion that assumptions about potential subjective similarity could account for a portion of the relationship between objective similarity and ratings of liking and attractiveness (Marcus, Sakamoto, Virmani, & Pinel, 2013 as cited in Pinel, Bernecker, & Rampy, 2015). Similarly, Long, Pinel, and Yawger (2017) found that assumptions about subjective similarity mediated people's preference for members of their own group over members of other groups.

Drawing from his seminal research showing that attitude similarity increases attraction, Byrne (1971) posits a reinforcement model of attraction, wherein individuals are attracted to those with whom they share attitudes because they provide validation for the individuals' own beliefs. While attitude similarity is a concept that falls under the purview of Me-sharing and objective similarity, the suggestion that belief validation is a driving force behind attraction is

consistent with the theory underlying I-sharing. We like those whom we predict will interpret the world in the same way that we do. Because of the existential divide that prevents us from truly knowing another person, we can never truly ascertain the extent to which their interpretation of the world mirrors ours, but attitude similarity can serve as a proxy through which we make assumptions about the subjective experiences of others, and the subsequent validity of our own experiences (Byrne, 1971; Montoya & Horton, 2013; Marcus, Sakamoto, Virmani, & Pinel, 2013 as cited in Pinel, Bernecker & Rampy, 2015).

Another explanation of the link between similarity and attraction is proposed in the information processing theory, where the likelihood that a characteristic will promote attraction between two individuals is based on the valence and weight of that characteristic (Kaplan & Anderson, 1973). Within this theory, a piece of information is designated an affective rating (valence), where information about objective similarities typically yields a positive rating, as well as an importance rating (weight), such that information that allows for more complex inferences about the individual is rated as more important (Montoya & Horton, 2013). Though these theories differ in their explanation of the processes mediating the relationship between similarity and attraction, both recognize the tendency for humans to prefer those whom they expect to view the world the way they do, thus suggesting that in seeking out objectively similar others, we are actually hoping to identify those with whom we can share subjective experiences (Marcus, Sakamoto, Virmani, & Pinel, 2013 as cited in Pinel, Bernecker, & Rampy, 2015).

Both the reinforcement theory and information processing theory of attraction suggest that the determination of attractiveness derives less from the literal meaning of the similar characteristics shared between two individuals, and more from the implications of those shared characteristics, specifically that an individual's attitudes are valid and acceptable and that these

shared characteristics will translate into shared views and experiences (Byrne, 1971; Kaplan & Anderson, 1973; Rokeach, 1973).

Condon and Crano (1988) suggest that the premise for the attraction and similarity relationship rests on inferred attraction, or our belief that individuals with attitudes similar to ours will rate us as more attractive. The authors hypothesize that we like those whom we assume will like us, and that this assumption stems from the degree to which we perceive ourselves to be similar. This analysis diverges from other explanations of the similarity-attraction paradigm in suggesting that the *perception* of similarity carries more weight than *actual* similarity (Condon & Crano, 1988; Montoya & Horton, 2013). Experimental research evaluating the inferred attraction concept reveals that perceived similarity is in reality a stronger predictor of attraction than actual similarity (Tidwell, Eastwick, & Finkel, 2012). This finding aligns closely with the I-sharing construct, in that the mere perception of a shared subjective experience – impossible to verify or substantiate – is enough to promote liking between the individuals involved, just as perceived objective similarity is sufficient to increase ratings of attraction (Tidwell et al., 2012; Condon & Crano, 1988). It is also worth noting this relationship works reciprocally; not only do we like those whom we perceive to be similar to ourselves, but we also perceive greater similarity with those whom we like (Murray, Holmes, Ballavia, Griffin, & Dolderman, 2002).

In their seminal text on the I-sharing construct, Pinel and colleagues (2004) assert that I-sharing may offer a more significant contribution to ratings of interpersonal attraction than Me-sharing does because I-sharing offers the surest validation of an individual's subjective self. Drawing upon research linking objective self-awareness (Duval & Wicklund, 1973), self-objectification theory (Frederickson & Roberts, 1997), and consumerism (Kasser & Ahuvia, 2002), Pinel et al. (2004) maintain that emphasizing the self-as-object is not without deleterious

effects. By connecting with others via shared subjective experience, individuals feel validated in their unique state of consciousness in a way that sharing objective characteristics alone cannot provide (Pinel et al., 2004; Pinel et al., 2006; Pinel & Long, 2012). Pinel et al.'s (2004) early research separating the effects of Me-sharing and I-sharing on interpersonal attraction lays the foundation for the now widely accepted impact of shared subjective experience on interpersonal connection, and is the origin of more than a decade's worth of I-sharing findings, which are reviewed in the following section.

Review of I-Sharing Findings

More than a decade of research supports the impact of I-sharing on several key areas of interpersonal functioning. Beginning with Pinel et al.'s (2004) original work, I-sharing manipulations consistently indicate that shared subjective experiences facilitate positive feelings, or "liking." Pinel, Bernecker, and Rampy's (2015) review of I-sharing's applications to the clinical setting highlights four major I-sharing effects, including the impact of I-sharing on interpersonal connectedness, existential isolation, prosocial behavior, and relationships beyond the initial I-sharing encounter. These same broad I-sharing effects are utilized in this review to organize the existing I-sharing findings.

I-Sharing Promotes Interpersonal Connectedness

In their initial I-sharing work, Pinel and colleagues (2004; 2006) used a series of three preliminary studies to dismantle the unique contributions of I-sharing and Me-sharing to ratings of "liking." In these studies, participants imagined a classroom encounter on the first day of a college course. They imagined encountering two students, both of their same gender, one of whom was from their same hometown (objectively similar) and the other of whom was from outside of the United States (objectively dissimilar). Participants were randomly assigned to I-

share with either the objectively similar classmate or the objectively dissimilar classmate. In the first study, I-sharing was manipulated by having the participant imagine that the assigned classmate expressed an identical visceral reaction to theirs (either love or hatred) about a particular musical group. In the second and third studies, I-sharing was manipulated by having participants imagine that they displayed an identical affective response to a joke (giggling or not giggling) at the same time as the assigned classmate. Participants then rated the degree to which they liked the two classmates. Across all three studies, participants demonstrated a statistically significant preference for the classmate with whom they I-shared, regardless of whether they shared objective similarities with that classmate. These findings indicate that I-sharing offers a contribution to “liking” above and beyond the impact of objective similarity alone (Pinel et al. 2004; Pinel et al. 2006).

In a series of follow-up studies, Pinel & Long (2012) evaluated the impact of I-sharing on ingroup-outgroup relations in a series of studies examining the social identity factors of gender and sexual orientation. In the first study, female participants were led to believe they were completing the Imaginiff game with two ostensible partners, one male and one female. Participants were randomly assigned to I-share with the male (outgroup) or female (ingroup) partner, and the salience of this social identity characteristic (gender) was assessed and controlled for as an individual difference factor. The computer-based modification of the Imaginiff task required participants to imagine celebrities as members of a different category (e.g. “Imagine if Oprah Winfrey were an instrument”) and to select an instance of that category to represent the individual (e.g. “cello, piano, flute, oboe, trumpet”). The researchers maintained that because these questions are outside of usual experience, individuals could not draw upon existing memory and experience in order to answer them. As such, individuals were required to

rely upon their conscious, in-the-moment experience in order to respond, and when their ostensible partners responded in an identical fashion, they were engaging in an instance of shared subjective experience i.e. I-sharing. Following the Imaginiff game, participants rated their partners on a series of “liking” items and then selected one of the partners to engage in an in-person task with. The results highlighted an overall preference for the I-sharing partner, such that individuals preferred the ingroup member when they I-shared with the ingroup member, but they preferred the outgroup member when they I-shared with the outgroup member. Moreover, individuals consistently selected to complete the next task with the partner they I-shared with, regardless of that person’s group membership and regardless of the extent to which they identified with their gender group. In the second study, sexual orientation was selected as the social identity factor of interest. The same procedure was employed, with an additional independent variable. Some participants learned their partners’ sexual orientations prior to the Imaginiff task and some learned this information after the Imaginiff task. The findings were consistent with the first study, as participants rated those with whom they I-shared as more likeable, and preferred to work with them on a new in-person task, regardless of group membership and regardless of when they learned the information about their partners’ sexual orientation. The authors maintain that the ability of I-sharing to transcend social identity barriers is evidence of its power as a source of interpersonal connectedness (Pinel & Long, 2012).

Gaither, Remdios, Schultz, Maddox, & Sommers (2016) also employed the Pinel & Long (2012) methodology to evaluate the extent to which I-sharing promotes positive outcomes in interracial interactions. African-American and White participants were randomly assigned to interact with an ostensible partner with whom they either I-shared or did not I-share using the Imaginiff game. After this manipulation, participants rated how much they liked their partner and

then completed a second in-person task where they were assigned to function as the interviewee in an interview with a confederate outgroup member on either affirmative action (experimental) or transgender issues (control) and rated their anxiety during the interaction. While there was no effect of the previous I-sharing encounter on ratings of anxiety in a subsequent in-person encounter, Gaither et al. (2016) replicated the effect of I-sharing on liking found in Pinel and Long's (2012) work by once again demonstrating that individuals prefer those with whom they I-share over those with whom they share group membership. These findings once again support the notion that I-sharing fosters interpersonal connectedness, even among those who are objectively dissimilar.

More recently, Pinel, Yawger, Long, Rampy, Brenna, and Finnell (2017) examined the impact of I-sharing on ratings of liking and humanization of individuals from different racial groups (in Study 1) and different SES groups (in Study 2). In Study 1, participants engaged in a computer-based inkblot task (analogous to the Imaginiff task described above) with an ostensible partner. In the I-sharing condition, the partner appeared to select the same response on all of the 12 trials, whereas in the non I-sharing condition, the partner appeared to select the same response on only two of the 12 trials. Following this interaction, a confederate whom participants presumed to be the partner (either a white female or a black female) briefly entered the room to ask the participant a scripted question. Participants then rated the extent to which they liked their partner using Pinel and Long's (2012) measure of liking, as well as the extent to which they attributed secondary emotions to their partner, which is viewed as a representation of "humanization." In concordance with previous research, participants who I-shared with their partner rated them as more likeable than those who did not I-share with their partner, regardless of group membership. Additionally, when participants I-shared with a black partner, they

attributed greater humanity to her. In the second study, socioeconomic status (SES) was the ingroup/outgroup dimension and measures of mechanistic and animalistic dehumanization were included in addition to the liking measure used in Study 1. As predicted, participants who I-shared with their partner rated them as more likeable, and attributed greater humanity to them, than participants who did not I-share with their partner, regardless of whether the partner came from their same SES group or a different group.

Overall, these findings highlight the power of I-sharing as a tool to facilitate interpersonal connectedness, even among objectively dissimilar individuals. Even when objective characteristics incredibly salient to the individual's self-concept, such as race, gender, and sexual orientation, differed between participants and their partner(s), the sense of belongingness and validation provided by the I-sharing experience was meaningful enough to transcend underlying ingroup-outgroup biases (Pinel et al., 2004; Pinel et al., 2017; Pinel & Long, 2012). These effects have been demonstrated to hold in non-Western samples as well, suggesting that the influence of I-sharing on interpersonal connectedness may be experienced universally across interpersonal interactions (Qian & Bin, 2009; Liu & He, 2011).

I-Sharing Reduces Existential Isolation

The earliest work on I-sharing proposed that part of the power of I-sharing comes from its ability to reduce individuals' feelings of existential isolation by validating their experiences and providing a unique connection with others (Pinel et al., 2004). Many of the I-sharing research paradigms include studies that either manipulate existential isolation, or measure individual differences in existential isolation, to test the hypothesis that I-sharing may be especially appealing to people with high levels of existential isolation. Study 4 of Pinel et al.'s (2004) work demonstrated that individuals higher in "interpersonal dependence," conceptualized

as a proxy for existential isolation, showed an increased preference for I-sharers as compared to individuals who described themselves as lower in interpersonal dependence. Study 5 from this same paper involved the manipulation of existential isolation prior to exposure to an I-sharing interaction. Participants who were asked to reflect on a time that they felt “alone in a crowd” indicated a significantly stronger preference for an I-sharer than those who were not primed with this existential isolation task (Pinel et al., 2004).

The third study in Pinel & Long’s (2012) research on social identity and I-sharing also examined existential isolation as a moderator of I-sharing effects. White participants first completed Pinel, Long, Murdoch, & Helm’s (2017) measure of existential isolation. Then they were matched up with two ostensible partners, one of whom was African-American and the other of whom was European American, for two computer tasks. One computer task involved the Imaginiff task described above to manipulate I-sharing. The other computer task involved exchanging lists of important values to manipulate a dimension of objective similarity that most people see as central to their self-views (Rokeach, 1973). Participants were randomly assigned to I-share with the African-American partner and value-share with the European-American partner, or to I-share with the European-American partner and value-share with the African-American partner. Whereas participants low in existential isolation preferred the value-sharer to the I-sharer, regardless of racial identity, participants high in existential isolation demonstrated a clear preference for the I-sharer over the value-sharer, again regardless of racial identity. The authors maintain that the greater appeal of I-sharing to those high in existential isolation provides support for the overall value of I-sharing for reducing feelings of existential isolation (Pinel & Long, 2012; Pinel et al. 2004; Pinel, Bernecker, & Rampy, 2015).

In a related investigation, Mayo and Long (2016) created an inside joke between participants and an ostensible partner as a manipulation of I-sharing. They discovered that the inside joke increased liking for the partner, increased perceptions of similarity with the partner, and also reduced participants' feelings of existential isolation.

Pinel et al.'s (2006) research highlights the preference that existentially isolated individuals display for I-sharers over Me-sharers (Pinel et al., 2006), the increases in feelings of existential isolation that come from writing about times when I-sharing *did not* occur (Pinel, Long, Johnson, & Helm, 2017) and from reading about I-sharing experiences between other people in which participants themselves are not involved (Mayo & Long, 2016), and the relationship between existential isolation and poor need fulfilment (Pinel, Johnson, & Grover, 2014 as cited in Pinel, Bernecker, & Rampo, 2015) as evidence that the constructs of I-sharing and existential isolation are inextricably linked.

I-Sharing Supports Relationship Building Behavior

Given the established impact of I-sharing on ratings of interpersonal connectedness and liking, recent studies have sought to explore the potential impact of I-sharing on prosocial behavior. Huneke & Pinel (2016) hypothesized that I-sharing would promote acts of selflessness and greater generosity toward that person by facilitating a unique connection between them. In the first of two studies, individuals interacted with three ostensible partners, with one of whom they Me-shared (same year in college), with one of whom they I-shared (via the inkblot task), and with one of whom they neither Me-shared nor I-shared. Participants then rated the extent to which they liked their partners using a previously established liking measure (Pinel & Long, 2012). Following this, participants engaged in a resource allocation task, where they were required to apportion M&Ms between themselves, the Me-sharer, the I-sharer, and the person

with whom they neither I-shared nor Me-shared. Not only did participants rate the I-sharer as significantly more likeable than both the Me-sharer and the person with whom they neither I-shared nor Me-shared, but they also allocated significantly more M&Ms to the I-sharer. The allocation between the Me-sharer and the person with whom they neither I-shared nor Me-shared was approximately equal. In Study 2, the authors manipulated Me-sharing as belief-sharing (operationalized as agreement on concepts the participant was likely to have considered prior to the experiment, such as the statement “blue is an attractive color”), and they manipulated I-sharing with a combination of the inkblot and Imaginiff tasks described above. Participants I-shared but did not Me-share with one partner; they Me-shared but did not I-share with the other partner. Participants then rated how willing they would be to help their partners, how much they liked their partners, and how much they believed their partners would be willing to help them. Ratings of liking emerged as largely equivalent between the Me-sharer and the I-sharer; however, participants expressed a significantly stronger intention to help the I-sharer than the Me-sharer. Participants also perceived that the I-sharer would be more likely to assist them than the Me-sharer. This increase in helping behavior is touted to be a unique impact of the I-sharing experience and is hypothesized as a potential tool for facilitating prosocial behavior among objectively dissimilar individuals (Huneke & Pinel, 2016).

Pinel, Long, & Huneke (2015) furthered the understanding of I-sharing’s influence on prosocial behavior by evaluating the impact of I-sharing on cooperation in a prisoner’s dilemma game (see Wong & Hong, 2005). The authors also drew upon research on synchrony to empirically test the importance of simultaneity for I-sharing inferences. Participants interacted with either an I-sharer (manipulated via the inkblot task), Me-sharer (manipulated via self-reported personality characteristics), or a partner with whom they neither I-shared nor Me-

shared. In addition to manipulating similarity, the researchers also manipulated the length of time it took for the partner's responses to appear on the computer screen. In the immediate condition, responses from the ostensible partner appeared 500ms after the participant's response; in the delayed condition, the partner's responses appeared 10s later. The results confirmed the importance of simultaneity for I-sharing inferences. In the I-sharing condition, participants selected more cooperative responses in the prisoner's dilemma game in the immediate condition than in the delayed condition. In contrast, the delay had no impact on cooperative behavior in the Me-sharing condition or in the condition in which participants neither I-shared nor Me-shared with their partner. These results suggest that simultaneous responding is critical for drawing I-sharing inferences, and also that the importance of simultaneous responding is unique to the I-sharing construct. The authors posit that I-sharing supports prosocial behavior in both situations where the individual has something to gain (e.g. the Prisoner's Game) as well as situations where they face no personal benefits from cooperation (Pinel, Long, & Huneke, 2015; Huneke & Pinel, 2016).

I-Sharing has a Ripple Effect

Perhaps one of the most noteworthy extensions of recent I-sharing research is the assertion that I-sharing in one interaction has implications for interpersonal relations outside of the initial encounter. Pinel, Bernecker, & Rampy (2015) maintain that the I-sharing "ripple effect" stems from the unique contribution of I-sharing to the fulfillment of individuals' belongingness and self-validation needs. When individuals I-share, their basic ego-needs are met, which enables individuals to shift from an inward focus to an outward focus, which in turn facilitates adaptive interpersonal expression (Wayment & Bauer, 2008; Pinel, Bernecker, & Rampy, 2015). Johnson, Pinel, & Long, 2014, as cited in Pinel, Bernecker, & Rampy, 2015,

demonstrated that, for individuals high in baseline existential isolation, I-sharing during one part of the experimental session facilitates increased prosocial behavior toward a different partner in a later part of the experimental session. In this study, prosocial behavior was measured by the number of times participants threw a ball to a player from a stigmatized group (for a description of the Cyberball task see Williams, Cheung, & Choi, 2000).

In another study investigating the effect of I-sharing on prosocial behavior, Pinel, Johnson, and Grover (2014) demonstrated that I-sharing with a stranger contributes to couples' willingness to compromise on household chores. Couples were randomly assigned to either I-share or not I-share with a stranger. Following this interaction, each participant rated his or her proposed effort level for household chores. He or she then met with his or her romantic partner to come to a compromise on the division of chores. After the compromise meeting, each individual once again rated his or her planned effort level. Notably, the only participants who maintained the effort level they agreed upon with their significant other were those who I-shared with a stranger in the initial task. The authors extrapolate from this finding to suggest that I-sharing may support prosocial behavior not only with the target of the I-sharing, but also with those whom they encounter following this interaction (Pinel, Johnson, & Glover, 2014 as cited in Pinel, Bernecker, & Rampy, 2015).

Other research has investigated the impact of I-sharing on reducing subsequent conformity (Pinel, Long, & Crimin, 2010). The researchers found that participants who had undergone a computerized I-sharing manipulation with an ostensible partner were subsequently significantly less likely to conform during a replication of the Asch line judgment conformity task (1951). Additionally, as noted above, I-sharing has also been shown to increase ratings of an

outgroup member's humanity (Pinel et al., 2017), and this effect extends to the group as a whole, as well (Pinel et al., 2018).

Taken in conjunction, these findings suggest that the prosocial impact of I-sharing is not limited to positive relationship building behaviors with the person with whom one I-shares. Instead, the effects of I-sharing extend to other people outside of the I-sharing encounter. For this reason, I-sharing tasks may be particularly useful in efforts to support improved inter-group relations, as well as in the modeling of adaptive social functioning to those struggling with interpersonal concerns, which is a common issue that arises in psychotherapy (Markowitz & Weisman, 2004).

Limitations of Existing I-Sharing Research

The existing I-sharing literature addresses a number of dependent variables of interest to social and clinical researchers alike. The findings from the last fifteen years of study consistently demonstrate the relationship between I-sharing and interpersonal connectedness, existential isolation, prosocial behavior, and relationships beyond the initial I-sharing encounter (Pinel, Bernacker, & Rampy, 2015). Though these findings have been consistently replicated, the body of I-sharing research is not without its limitations. First and foremost, all of the existing manipulations of I-sharing have occurred using ostensible partners and computer-based interactions rather than face-to-face exchanges. The current study is the first known attempt to manipulate I-sharing in an in-vivo encounter. Second, the existing research methodologies emphasize immediate dependent variables over analysis of long-term variables. Existing research does not include long-term follow-up on the variables of interest; thus, the data cannot be effectively extrapolated to understand how I-sharing may influence interpersonal functioning over time. Finally, the bulk of I-sharing research has been conducted using university student

samples rather than community-based samples or clinical samples. It is plausible that I-sharing may function differently in more diversified samples, particularly among individuals presenting with mental health concerns. Though the current study does not utilize a genuine help-seeking sample, the design of the study aimed to recruit participants more akin to those who might be entering into psychotherapy.

Application of I-Sharing to Psychotherapy

In 2015, Pinel, Bernecker, and Rampy published a review of the existing I-sharing literature and posited that I-sharing could have a beneficial impact in the clinical setting. The authors pulled from research on the therapeutic alliance, empathy, synchrony, client-therapist matching, and self-disclosure to highlight the potential applications of I-sharing as a tool to strengthen the working relationship between a clinician and his or her patient. This literature review does not aim to present an exhaustive synthesis of psychotherapy outcome research in the aforementioned domains. A brief synopsis of the major literature in each of these subareas is provided as a contextual basis for the application of I-sharing research to the clinical setting (for a thorough exposition on psychotherapy outcome research, see Wampold & Imel, 2015 and Lambert, 2013).

The Therapeutic Alliance

The Therapeutic Alliance (TA) is the single most researched of the common factors of psychotherapy, or the aspects of psychotherapy that are shared across theoretical orientations, and is the factor that demonstrates the strongest relationship with treatment outcome (Wampold, 2015; Lambert, 2013; Horvath, Del Re, Fluckiger, & Symonds, 2011). In its most complete definition, the TA includes the relationship between the clinician and his or her patient, consensus on the goals of the treatment, and agreement on the specific therapy tasks that will be

used to achieve those goals (Bordin, 1979 as cited in Wampold, 2015). Meta-analyses evaluating the contribution of the TA to treatment outcome suggest that approximately 7% of the variance in treatment outcome is explained by the TA, with the broader category of “relationship factors” accounting for approximately 30% of the variance (Horvath, Del Re, Fluckiger, & Symonds, 2011; Hubble, Duncan & Miller, 1999). In specific treatment groups, the contribution of the alliance to overall treatment progress is even more substantial. The TA is of marked importance in treatment with children, adolescents, and families, as well as with individuals suffering from complex mental health concerns, such as personality pathology and eating disorders (Shirk & Carver, 2011; Friedlander, Escuerdo, Heatherington, & Diamond, 2011; Bender, 2005; Graves et al., 2017). The alliance is purported to serve an important function in the early stages of treatment, prior to the point where measurable symptom reduction is achieved, thus the initial formation of a strong working relationship is essential for promoting success in psychotherapy (Crits-Christoph, Gibbons, Hamilton, Ring-Kurtz, & Gallop, 2011; Norcross & Lambert, 2010; Hubble, Duncan, & Miller, 1999). Client ratings of the alliance are more reliable than therapist ratings, and are more predictive of treatment success or failure (Hubble, Duncan, & Miller, 1999). This distinction is relevant in the application of I-sharing to developing, and subsequently measuring, the TA as the theory behind I-sharing asserts that only one individual needs to believe that he or she has I-shared with another person in order for I-sharing to occur (Pinel et. al, 2004). As such, it is possible that a clinician could believe that he or she has I-shared with a client, but the client does not believe that I-sharing has occurred. Given that the alliance is more predictably measured by client ratings than therapist ratings, any measurement of I-sharing in psychotherapy should also be conducted using patient ratings (Hubble, Duncan, & Miller, 1999; Pinel, Bernacker, & Rampy, 2015).

Several factors have been identified as components of the TA; these include accurate empathy, positive regard, nonpossessive warmth, and congruence (Hubble, Duncan, & Miller, 1999; Wampold, 2015; Wampold & Imel, 2015). Empathy is one of the strongest contributors to the TA (Elliot, Bohart, Watson, & Greenburg, 2011); as such, the role of empathy in psychotherapy, and the potential I-sharing implications for this construct, are explored in the following subsection. The extent to which the remaining components of the alliance can be effectively implemented relies heavily on patient expectations, attachment style, emotional reactance, and coping style (Norcross & Wampold, 2011; Bohart & Wade, 2013). As a whole, client factors have the most considerable impact on treatment outcome (Bohart & Wade, 2013). Deficits in any of these areas may make the formation of an effective working alliance particularly difficult. With I-sharing's impact on liking and feelings of connectedness clearly established (Pinel et al., 2006; Pinel, Bernecker & Rampy, 2015), it stands to reason that I-sharing may have a unique role to play in the therapeutic setting, especially for patients whose characteristics are associated with poorer outcomes (Bohart & Wade, 2013).

Pinel, Bernecker, & Rampy (2015) hypothesize that I-sharing may serve as a useful tool for early alliance formation, particularly when working with clients who are high in existential isolation. I-sharing is purported to foster interpersonal connectedness and support prosocial interpersonal functioning by fulfilling individuals' needs for belonging and experiential validation (Pinel et al., 2004). It stands to reason that when these needs are met within the context of the therapeutic relationship, the individual will be more trusting of the clinician, will perceive him or her as more genuine, and will be more willing to engage in therapy in an open and cooperative fashion; all of these client behaviors have been linked to improved outcomes (Bohart & Wade, 2013). Moreover, research suggests that clients respond positively to

“therapeutic presence,” defined as in-the-moment attention to the client’s present experience, and that a clinician’s ability to engage with his or her client in this way is predictive of a strong working alliance (Bohart & Wade, 2013). This congruence of in-the-moment experiences is in many ways similar to the foundation of the I-sharing construct. If a clinician I-shares with her client, she will be showing therapeutic presence. Additionally, expressions of hope from the therapist have been linked to increased expressions of hope in the client, and prosocial behavior in session is associated with increased rapport (Bohart & Wade, 2013). Based on the link between I-sharing and increased prosocial behavior, it can be argued that I-sharing between a clinician and his or her patient could positively impact the alliance through the pathway of increased prosocial behavior in the therapeutic relationship (Bohart & Wade, 2013; Pinel, Long, & Huneke, 2015).

Given I-sharing’s documented impact on fostering interpersonal connection, relationship building behavior, and need fulfillment, the potential for I-sharing to strengthen the TA is clear (Pinel, Bernecker, & Rampy, 2015). As the provision of psychotherapy services shifts to accommodate the increased use of technology in practice, as well as the growing emphasis on integrated care, the ability to quickly and effectively develop a solid TA is of increasing importance. It is possible that tasks designed to facilitate I-sharing in therapy could be of benefit to this end.

Empathy

The expression of empathy is one of the primary mechanisms by which Pinel and her colleagues (2015) propose that I-sharing can be facilitated within the therapeutic setting. As defined by Wampold (2015), empathy is the route through which individuals are impacted by, and take part in, the emotional experiences of those around them; empathy is based in

perspective taking and is considered an integral component of functional social interactions.

Warmth and genuineness, though often considered unique relationship factors, are also closely linked with the empathy construct.

Utilizing Wampold's (2015) definition, it is easy to see how empathy could serve as a tool for fostering I-sharing within a therapeutic context; however, it is important to note that empathy does not inherently facilitate I-sharing, as I-sharing is an inference on the part of one of the individuals involved in the interaction (Pinel et al. 2004). Other social psychological phenomena including the concepts of shared reality, shared social identity, and self-verification may also be relevant in empathic exchanges without involving I-sharing. For example, an individual who views his or herself as "struggling" may seek out psychotherapy as verification of this self-view and an opportunity for confirmation of other relevant self-views, such as the view that he or she "can change." The therapist and client are likely to engage in certain behaviors based upon their shared social identity within their respective groups (patient and provider), which might include provision of empathic responding on the part of the provider and solicitation of empathic responding on the part of the patient. These behaviors may in turn facilitate a sense of shared reality, where both individuals objectively concur on what occurred during the course of the empathic exchange, but still have distinct conscious in-the-moment experiences of the exchange. It is only when an individual perceives that he or she is having the same conscious in-the-moment experience as another person that the threshold for I-sharing is reached (Pinel et al., 2004).

Empathic responses take many forms, including cognitive, affective, and behavioral expressions, and the degree to which a particular empathic response fosters rapport is largely dependent upon the client's interpersonal style (Hubble, Duncan, & Miller; 1999; Elliot, Bohart,

Watson, & Greenburg, 2011; Bohart & Wade, 2013). Meta-analytic studies reveal that the majority of clients prefer a cognitively based empathic response from the clinician, e.g. they desire to feel as though the therapist can “read their mind” (Hubble, Duncan, & Miller, 1999). This “mind-reading” style of empathy is consistent with the I-sharing construct in that clients are seeking to feel understood and validated in their unique experience of the world (Elliot, Bohart, Watson, & Greenburg, 2011; Pinel et al., 2004). In studies of parent-adolescent interactions, cognitively based empathy is linked to improved conflict resolution and problem-solving behavior (Van Lissa, Hawk, & Meeus, 2017). This mirrors the finding that I-sharing, arguably a similar construct to feeling that one’s “mind is being read,” promotes relationship building behaviors (Pinel & Huneke, 2016; Pinel, Long, & Huneke, 2015). As such, the cognitive expression of empathy in psychotherapy may serve as a mechanism by which patients can perceive that they are I-sharing with their therapist.

Both I-sharing and empathy researchers are quick to note that the degree to which empathy impacts the working relationship derives largely from the accuracy and congruence of the empathic response (Pinel, Bernecker, & Rampy, 2015; Elliot, Bohart, Watson, & Greenburg, 2011). There is a medium effect of congruence on treatment outcome, suggesting that, whatever form of empathic expression is selected, the patient’s perception that he or she is understood is of critical importance (Kolden, Klein, Wang, & Austin, 2011; Wampold, 2015). Similarly, the accuracy of the clinician’s empathic response, e.g. the extent to which the thoughts and feelings reported by the target (patient) are correctly inferred by the respondent (clinician), has been linked to increased ratings of likability, compassion, and interpersonal skill (Hall, 2014). These findings on empathy are similar to findings on I-sharing as they suggest that the perception of congruence, operationalized as identical responding in the I-sharing literature, is a component of

fostering interpersonal connection (Hall, 2014; Pinel, Bernacker, & Rampy, 2015). At the same time, these findings also offer a concrete example of how I-sharing and empathy are not one and the same: an empathic response does not need to be identical to the client's in-the-moment experience in order to create a sense of understanding and emotional recognition. For instance, a client may begin to cry while detailing a painful experience. It would be not only inappropriate, but potentially detrimental, for a clinician to respond in an identical fashion. In this case, a sense of understanding and support can be conveyed without engaging in an identical expression of emotion. A client may perceive that the clinician understands their experience without having an identical shared experience in the moment. That being said, I-sharing may be inferred without an identical behavioral display. In essence, the relationship between I-sharing and empathy is akin to that of squares and rectangles. All squares are rectangles, but not all rectangles are squares. Engaging in an empathic interaction with a client is a way to induce I-sharing, but not all instances of empathy will lead to inferences of I-sharing.

A myriad of I-sharing findings suggest that individuals higher in baseline existential isolation prefer I-sharers over Me-sharers. Pinel and her colleagues (2015) extrapolate from this data by positing that patients high in existential isolation may require different empathic responses from their therapists. These individuals may respond more strongly to affective empathic responses, or the participation of the therapist in the client's feeling state (Hubble, Duncan, & Miller, 1999; Pinel, Bernecker, & Rampy, 2015). Behavioral expressions of empathy, including postural mirroring and the matching of appropriate facial expressions, also serve as proxies by which individuals may perceive that they have I-shared with their therapist and may help to convey a sense of validation and understanding through sharing a simultaneous and

identical response (Elliot, Bohart, Watson, & Greenburg, 2011; Pinel et al., 2004). This assertion is further detailed in the section on synchrony.

Synchrony

While synchrony can be viewed under the umbrella of behavioral empathy, this form of matched response may offer a unique pathway for the facilitation of I-sharing in clinical encounters. As was previously mentioned, synchrony in nonverbal mirroring parallels the proposed conditions for I-sharing to occur as, by definition, nonverbal mirroring occurs simultaneously and identically (Pinel, Bernecker, & Rampy, 2015). Greater frequencies of nonverbal synchrony in therapy sessions are associated with positive treatment outcomes, higher quality therapeutic relationships, and higher rates of symptom reduction (Ramseyer & Tschacher, 2011). Studies evaluating the link between nonverbal behavior and patient-therapist rapport reveal that rapport is most accurately judged when reviewers have access to data on nonverbal behavior, suggesting that synchronous expressions are a predictor of a more effective working relationship (Grahe & Bernieri, 1999). Even seemingly minor expressions of behavioral synchrony, such as the coordination of hand movements, is associated with increases in positive treatment outcomes (Ramseyer & Tschacher, 2016). Within the framework of I-sharing, synchrony of behavior is predicted to foster rapport because it implies that individuals are sharing in an immediate subjective experience (Pinel, Long, & Huneke, 2015). Nonverbal mirroring provides individuals with the suggestion that the person with whom they are interacting is experiencing a stimulus in the same way that they are; behavioral mirroring is difficult to feign, and as a result, may serve as a stronger indicator of I-sharing than cognitive or affective expressions of empathy (Pinel, Bernecker, & Rampy, 2015). Furthermore, a strong body of literature details the relationship between nonverbal mirroring, mimicry, and

synchronized movement and ratings of rapport and interpersonal attraction (Bernieri, Rznick & Rosenthal, 1988; Chartrand, Maddux, & Lakin, 2005; Miles, Nind, & Macrae, 2009). In essence, nonverbal mirroring and I-sharing appear to share a reciprocal relationship. Specifically, nonverbal mirroring may help to imply that I-sharing has occurred, and this perception of subjective similarity may in turn increase the likelihood of dyadic mirroring in future interactions (Pinel, Bernecker, & Rampy, 2015). Further, nonverbal mirroring is associated with greater client ratings of client-therapist rapport (Miles, Nind, & Macrae, 2009). It is possible that the perception of subjective similarity (e.g. I-sharing), which is implied by nonverbal mirroring, is the mediating force through which mirroring serves to increase rapport.

Client-Therapist Match

It is not uncommon for first-time psychotherapy patients to request a provider who matches them on some domain of objective similarity (Bhati, 2014). Given the breadth of research highlighting the relationship between objective similarity and attraction, specifically the findings related to our tendency to seek out those whom we believe will “like” us (Condon & Crano, 1988), it is understandable that clients often desire to work with practitioners with whom they share some objective quality. However, Pinel and her team (2015) propose that patients’ preference for objectively similar others is actually a function of their desire to work with someone who they presume will understand their experience (e.g. someone with whom they will I-share) rather than a strict emphasis on similarity of Me-sharing qualities. Patients expect that they are more likely to feel understood, connected to, and validated by (e.g. more likely to I-share with) an individual with whom they share objectively similar traits (Pinel, Bernecker, & Rampy, 2015). However, as the I-sharing literature clearly indicates, objective similarity is not a prerequisite for shared subjective experiences, which serves as an explanation for the weak

association between client-therapist match and outcome. Research on client-therapist matching consistently indicates that pairing clients and therapists in relation to objective traits, such as race and gender, has little impact on overall treatment outcome (Cabral & Smith, 2011). While consideration of the client's treatment preferences is associated with more positive treatment outcomes, the specific effect of matching based on objective traits is minimal (Presnell, Harris, & Scogin, 2012; Bhati, 2014). The correlation between perception of subjective similarity (e.g. I-sharing) and perception of objective similarity is approximately 0.5 (Marcus, Sakamoto, Virmani, & Pinel, 2013 as cited in Pinel, Bernecker, & Rampy, 2015). With this overlap in mind, it is plausible to surmise that when a client is seeking out an objectively similar therapist, he or she is really seeking an I-sharing partner.

Though research has consistently demonstrated that objective similarity between client and therapist has little bearing on the therapeutic alliance, the impact of perceived subjective similarity on psychotherapeutic relationships remains unexplored. A more nuanced understanding of shared subjective experiences in psychotherapy may serve as a pathway for improving therapy outcomes and more effectively pairing clients and therapists. By engaging in tasks associated with the increased likelihood of I-sharing, such as engaging interpersonal mindfulness or inserting experiences involving stimuli to which people display predictable reactions, therapists may be able to foster I-sharing experiences with their patients, which can in turn support the TA, increase opportunities for affective and behavioral mirroring, and improve treatment outcomes overall (Pinel, Bernecker, & Rampy, 2015; Bohart & Wade, 2013).

Self-Disclosure

Self-disclosure is an oft-contested topic in psychotherapy. Depending on a clinician's theoretical orientation and paradigm of training, he or she may have strict views on the role of

self-disclosure in the therapy setting (Prochaska & Norcross, 2011). There is limited research extolling the benefits of self-disclosure in the therapeutic context; however, several key studies suggest that disclosure may offer some benefit to certain clients under specific circumstances (Barrett & Berman, 2001; Howe, 2011). Potential benefits of self-disclosure include reduction of shame, reduced feelings of isolation, and an increased sense of hope and mastery (Howe, 2011). Limited self-disclosure has also been linked to improved perceptions of the clinician and increased willingness to engage in treatment (Henretty, Currier, Berman, & Levitt, 2014). The most commonly cited concern regarding therapist self-disclosure is the suggestion that disclosure may alter the focus of treatment away from the client's needs (Knox & Hill, 2003). Perhaps more concerning is the suggestion that in certain instances, self-disclosure may represent the first small misstep on the slippery slope toward a boundary violation (Howe, 2011). In fact, concern about self-disclosure, specifically the fear that one's therapist will disclose too much information about him or herself, is one of the primary deterrents cited by individuals who elect not to pursue psychotherapy (Vogel & Wester, 2003). Despite the notable trepidations about the potential deleterious effect of self-disclosure on the treatment process, studies estimate that nearly 90% of practicing therapists have disclosed personal information to a client at some time or another (Henretty & Levitt, 2010).

In determining when, and under what circumstances, self-disclosure is appropriate, clinicians must consider the motivation driving the proposed disclosure and the potential impact on the client (Godfried, Burckell, & Eubanks-Carter, 2003). Therapist disclosures are broadly grouped into three major categories: information about the therapist's education and theoretical approach to therapy, personal information about the therapist's life, and information about the therapist's thoughts and feelings in response to the client's in-session behavior (Peterson, 2002).

Personal information about the therapist is the category that is most often associated with inappropriate disclosures (Epstein, 1994 as cited in Peterson, 2002). Pinel, Bernecker, and Rampy (2015) suggest that in certain instances, therapist self-disclosures may allow for the perception of shared subjective experience by providing the client with the sense that the therapist has shared in experiences identical to their own. While it is plausible that self-disclosure could result in the inference of I-sharing, the revelation of personal information may also damage rapport, particularly if the therapist incorrectly assumes that his or her experience is identical to that of the patient (Howe, 2003; Pinel, Bernecker, & Rampy, 2015). For these reasons, self-disclosure is viewed as a possible mechanism for facilitating I-sharing in the clinical setting, but this tool must be used sparingly and may only be appropriate for specific patients.

Summary and Current Study

The effects of I-sharing manipulations on interpersonal connectedness, existential isolation, prosocial behavior, and relationships beyond the initial I-sharing encounter have been well-documented (Pinel et al., 2006; Pinel & Long, 2012; Pinel, Bernecker, & Rampy, 2015; Pinel et al., 2017; Pinel et al., 2018). Because the relationship between a client and his or her therapist is so central to the psychotherapy process, it is reasonable to believe that strategies for enhancing interpersonal connectedness and fostering positive feelings in social relationships, such as I-sharing, may be of use within the clinical context (Lambert, 2013; Pinel, Bernecker, & Rampy, 2015). Despite this, there is no research to date that examines the potential application of shared subjective experience to the therapeutic relationship.

The historical divide between clinical and social psychology research is beginning to close, as scholars and clinicians alike begin to recognize the value of considering interpersonal

factors in developing comprehensive courses of treatment for their patients (Markowitz & Weissman, 2004). The study outlined in this proposal serves as an experimental follow-up to Pinel and colleagues' (2015) review of the prospective applications of I-sharing in the therapeutic setting. The importance of a strong alliance in predicting psychotherapy outcomes is well established, as is the link between shared subjective experience and the facilitation of positive interpersonal interactions (Pinel et al., 2004; Pinel & Long, 2012).

The current study examines the impact of an in-vivo I-sharing manipulation on a series of interpersonal variables. First, the impact of I-sharing on the therapeutic alliance is evaluated. Pinel's body of work (2004, 2006, 2008, 2010, 2012, 2015, 2016, 2017, 2018) is used as a basis for the hypothesis that participation in a shared subjective experience task will increase participants' ratings of the alliance following a brief simulated clinical encounter. Second, a variation of Pinel & Long's (2012) measure of liking is used in an attempt to replicate the finding that I-sharing increases ratings of liking, as well as to build upon the existing body of I-sharing research by demonstrating that this finding holds in in-vivo interactions of a clinical nature. Third, impact of I-sharing on initial perceptions of psychotherapy is assessed, and it is hypothesized that participants who I-share with the interviewer will have more positive attitudes about therapy than non I-sharers because of their increased comfort and connectedness within the interview setting (Pinel, Bernecker, & Rampy, 2015). The fourth component of this study furthers the recent research on I-sharing's impact on prosocial behavior by testing the hypothesis that I-sharing with an interviewer in a simulated clinical encounter will improve participants' self-reported willingness to engage in prosocial behavior related to mental health. Finally, drawing from Pinel et al.'s (2004) research and later work by Mayo and Long (2016) as a framework, it is hypothesized that individuals who I-share with the interviewer will demonstrate

a decrease in ratings of existential isolation from baseline measurement to post-interview measurement, and that changes in self-reported existential isolation within this group will be greater than any changes reported by the no I-sharing group.

CHAPTER 3

METHOD

Participants

The sample consisted of college students, age 18 and over, who were enrolled in PSYC 101 (General Psychology) at a medium-sized university in western Pennsylvania. Participants were recruited through the PSYC 101 research participation pool, where all students seeking to obtain research credit required for their classes are registered. A total of 289 participants completed Part 1 of the study (a preliminary online questionnaire). From those participants who took part in the Part 1 online questionnaire, an additional 42 volunteered to take part in Part 2 of the study (an in-person interview). A final group of 59 participants, who were not involved in Part 1 or Part 2 of the study, completed Part 3 (a video fidelity check). Participants received one half-research credit for involvement in Part 1, one research credit for involvement in Part 2, and one research credit for involvement in Part 3. Participation records were coded such that no participant's identity could be linked to his or her responses after data collection.

Part 1

Participants ranged in age from 18 to 32 ($M=19.17$, $SD=1.47$). The sample was 51% Female ($N=148$) and 49% Male ($N=141$). In terms of race, 69% identified as European American/White, 15% as African-American/Black, 5% as Latina/Latino/Hispanic, 4% as "Other," 4% as Asian/Pacific Islander, 2.9% as Multiracial, 1% of the sample chose not to disclose their race, and <1% of participants identified as Native American/Alaska Native.

Part 2

Participants who completed Part 1 of the study were eligible to volunteer for Part 2. A total of 43 participants volunteered and presented for participation, and 42 of those interviews

were utilized in the final analysis (I-sharing N=21, no I-sharing N=21). Participants ranged in age from 18 to 32 ($M=19.60$, $SD=3.85$). The group was 40% Female ($N=17$) and 60% Male ($N=25$). Sixty-four percent of the sample identified as European American/White, 19% as African American/Black, 10% as Asian/Pacific Islander, 5% as “Other”, and 2% as Latina/Latino/Hispanic. Regarding previous involvement in psychotherapy, 88% of participants reported that they had never been involved in psychotherapy and 12% stated that they had.

Part 3

A total of 59 individuals volunteered for participation in Part 3 of the study. Individuals who participated in Part 1 and/or Part 2 were not eligible to participate. All participants were age 18 or older. Demographic characteristics of these participants were not recorded.

Procedure and Materials

The procedure and materials for each of the three phases of the study is discussed in detail below.

Part 1: Preliminary Online Questionnaire

The initial phase of the study involved an online questionnaire. The purpose of this online questionnaire was to obtain a baseline measure of existential isolation for participants who later completed the in-person interview.

Informed consent. When participants signed up for the online questionnaire, they were guided through the informed consent process (Appendix A).

Demographics. After providing their consent to continue, all participants completed a demographics questionnaire constructed by the investigator (Appendix B). This measure included questions about age, gender, and race/ethnicity.

Measuring existential isolation. Participants completed Pinel, Long, Murdoch, & Helm's (2017) Existential Isolation Scale (EIS; Appendix C). The EIS is a 6-item scale assessing the extent to which individuals feel that others share in their outlook, reactions, perspective, understanding, and experiences. Items were derived through factor analysis, and item content is based upon the Pinel et al. (2017) definition of existential isolation as "feeling as though one differs, either chronically or acutely, with respect to one's subjective experience" (p. 56).

Debriefing. After completing the online questionnaire, participants were provided with an online debriefing form (Appendix D) explaining that their participation made them eligible to sign up for an in-person interview and inviting them to do so, if they would like. After data collection for Part 2 was completed, participants who elected not to participate in Part 2 of the study were sent an additional debriefing form (Appendix E) that provided information about existential isolation.

Part 2: In-Person Interview

The in-person interview was advertised as an "opportunity to assist a psychology graduate student with clinical interviewing skills in exchange for research credit." This particular phrasing was used in an effort to recruit participants who were more likely to be invested in the interview process, and therefore more akin to a genuine clinical sample.

Informed consent. All interviews were completed at the Center for Applied Psychology (CAP), the internal training clinic for the Clinical Psychology Doctoral Program at the participating university. When a participant arrived at the CAP, he or she was greeted by the researcher and brought to an individual psychotherapy room where the researcher reviewed the informed consent form with the participant (Appendix F). Participants were told that they would be participating in an ice breaker game and a brief interview in order to help a psychology

graduate student practice her clinical interviewing and supportive therapy skills. For the purposes of this investigation, supportive therapy skills were defined as the use of basic clinical interviewing skills including: reflection, empathic statements, clarifying questions, validating comments, paraphrasing, redirection, and summarizing statements (Douglas, 2008; Pinsker et al., 2001; Shea & Barney, 2015). Specific psychological interventions were not utilized, and participants were informed that the interview did not constitute psychological treatment. Participants were made aware that, given the personal nature of the interview and the interviewer's status as a member of the Clinical Psychology Doctoral Program, the same limits of confidentiality that apply to the practice of psychotherapy also applied to the interview. Specifically, participants were informed that all statements made to the interviewer would remain confidential, with the exception of statements indicating danger to the self, danger to others, and statements providing reason to suspect the abuse of an elderly person or child. No formal notes were taken on the content of the interviews. Additionally, participants were informed that the interviews would be video-recorded, including audio recording, with the camera angled such that only the interviewer would be visible in the frame. Videos were stored on the CAP's secure server, which can only be accessed from inside the CAP by members of the university's Clinical Psychology Doctoral Program. Participants were informed that interview videos would be utilized to create two compilation videos that would ultimately be utilized in an additional study. Participants were told that the original video recordings would be spliced so that only the interviewer's questions and responses would be included, and the participant's responses would be completely omitted. The original videos were destroyed after the compilations were created.

A licensed clinical psychologist was present in the building during all interviews. Participants were informed that the licensed clinical psychologist would be consulted in the event that a limit of confidentiality was breached during the interview. In the event that a participant disclosed information during the interview that met the criteria for exemption from confidentiality, the data collected from his or her interview would not have been included in the analysis. Participants endorsing suicidal or homicidal thoughts would have been directed to appropriate referral sources in the community, including the CAP, the Indiana University of Pennsylvania Counseling Center, the Community Guidance Center, and Indiana Regional Medical Center. One participant's responses were omitted from the data analysis because of statements made during the interview regarding extensive depressive and anxious symptoms, which prompted a safety check and subsequent referral to treatment.

I-sharing manipulation. Participants were randomly assigned to either the I-sharing or the no I-sharing condition. The I-sharing task was disguised as an “ice-breaker game,” and it was based upon the manipulation used by Huneke & Pinel (2016). Each participant viewed five inkblot cards (Appendix G) with the interviewer and provided his or her description of what he or she saw on the card. In the I-sharing condition, the interviewer responded to the participant's description by stating that she agreed with the description of the image on the card, using one of the following agreement statements: “Oh I see it too,” “I see how you see that,” “I agree, I see it,” or “I see it as well” in all five of the trials. In the no I-sharing condition, the interviewer responded by disagreeing with the participant's perception of what was on the card for all five of the trials and offering a benign alternative interpretation of the image. The interviewer's disclosure of the alternative interpretation was based upon Huneke & Pinel's (2016)

manipulation, where individuals saw their ostensible partner's response to the inkblots in both the I-sharing and no I-sharing conditions.

In the no I-sharing condition, the interviewer responded to the participant's description using one of the following disagreement statements: "I don't quite see that, I see (insert animal/object)," "Interesting, I see a (insert animal/object)," "Oh, I think I see (insert animal/object)," or "I think I see a (insert animal/object) instead" for all five trials. For a list of alternate interpretations, see Appendix H. Alternate interpretations were generated from suggestions made by clinical psychology doctoral students. The alternate response utilized in each trial of the manipulation varied based upon the participant's response. For example, if a participant reported seeing "a face" in card 3 (Appendix G), the response "multiple turtles" or "bugs" (Appendix H) was utilized in order to create a sense of differential responding. In both conditions, the interviewer took care to display the same positive affect and interest in participants' interpretations of the inkblots.

Interview. The I-sharing manipulation was followed by an interview (for interview items, see Appendix I and for Interviewer Guide see Appendix J) lasting approximately 25 minutes, that included questions similar to those asked in a clinical intake. The Interviewer Guide was utilized to support consistency among interviews related to transitions between questions and basic reflective statements (Appendix J). Every participant was asked all of the questions listed on the interview sheet. There was some variability in the length of the interview based upon the participant's responses. Additionally, summarizing and validating comments varied based upon participant response. If a participant were to provide a detailed and emotionally loaded response, a summarizing comment would include additional content as compared to a summarizing comment made in response to a one sentence answer. For instance,

if a participant provided a detailed description of his relationship with his father in response to the prompt “Tell me about the person who has had the most significant impact on your life,” a summarizing comment would include more information about what was stated than a summarizing comment in response to the statement “My dad is my role model.” Interviews ranged from 22 minutes to 37 minutes with a modal time of approximately 25 minutes.

At the conclusion of the interview, participants were asked to complete the following measures:

Demographics. All participants completed a demographics questionnaire constructed by the investigator (Appendix I). This measure included questions about age, gender, race/ethnicity, and experience with psychotherapy (e.g. “I have been involved in psychotherapy in the past”).

Therapeutic alliance. A 12-item measure (Appendix J) based upon several existing and well-validated measures of the therapeutic alliance (the Helping Alliance Questionnaire, the Working Alliance Inventory, and the California Psychotherapy Alliance Scale) was developed for use in this study. Utilizing Bordin’s (1979) definition of the therapeutic alliance as a framework, the scale included items assessing three domains: the patient-therapist relationship, goal consensus, and perception of the session. The measure demonstrated good reliability ($\alpha=.81$) with no discordant items. Because the interview was not a true clinical interaction, the measure included a preamble asking the participant to imagine that they had just completed a therapy session and were considering a therapeutic relationship with the interviewer.

Liking. In Pinel and Long’s (2012) work on shared subjective experience with members of the outgroup, “liking” was measured with a series of five items. In Pinel and Long’s research, participants interacted with an ostensible partner rather than engaging in a face-to-face exchange, and their ostensible partner was a fellow college student, rather than a clinician. As such, the

items were modified for use here to be more appropriate following an in-person encounter between the participant and the interviewer. Using the same basic framework of Pinel and Long's items, participants were asked to rate how close they felt to the interviewer, how much they could imagine continuing a professional relationship with the interviewer, how comfortable they would feel working with the interviewer on a joint project, how willing they would be to meet with the interviewer again, and how much they liked the interviewer. Each item was rated on a scale ranging from 1 (not at all) to 7 (very much) (see Appendix K). The measure demonstrated good reliability ($\alpha=0.83$).

Perception of therapy. Participants' initial perceptions of therapy were assessed using two items rated on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). They were asked to rate the helpfulness of therapy by responding to the statements: "Based on my interaction today with the interviewer, I believe psychotherapy can be helpful" and "Based on my interaction today with the interviewer, I would be willing to refer a friend to therapy" (see Appendix L). The measure showed good reliability ($\alpha=0.88$).

Helping behavior. The impact of I-sharing on prosocial behavior related to mental health was assessed through the items "Based on my interaction today with the interviewer, I would be willing to talk to a friend about his or her emotional concerns" and "Based on my interaction today with the interviewer, I would be willing to appear in a mental health awareness advertisement campaign." A 7-point scale was utilized, where 1 indicated strong disagreement and 7 represented strong agreement (see Appendix L). The measure showed acceptable reliability ($\alpha=0.70$).

Existential isolation. Participants repeated the EIS scale (Appendix C) that they initially completed during the online survey portion of the study. The measure demonstrated good

reliability among interview participants in the initial online administration ($\alpha=0.82$) and excellent reliability in the administration following the interview ($\alpha=0.94$).

Participants were informed that their questionnaires would not be individually identifiable. The interviewer left the room during completion of the questionnaires. Participants were instructed to place the completed questionnaires in a yellow business envelope and to seal the envelope and place it in a file box in the therapy room that contained other yellow business envelopes. Participants were instructed to open the door to the therapy room in order to notify the researcher when they were finished with the questionnaires.

Debriefing. The researcher returned to the room to complete debriefing. During debriefing (Appendix M), participants were informed about the purpose of the I-sharing manipulation and were provided with a list of psychotherapy resources both on campus and in the community, in the event that their participation in this study prompted increased desire for psychotherapeutic treatment. Participants were provided with an opportunity to ask questions about the research and were asked not to disclose the purpose of the study to fellow PSYC 101 students while the research was ongoing.

Part 3: Fidelity Check

The third phase of the study involved a fidelity check. A group of 59 novel participants, who were not involved in Part 1 or Part 2 of the study, were recruited through the PSYC 101 research participation pool to view two 6-minute compilation videos comprised of segments of the interviewer asking questions and responding to the participants from Part 2 of the study.

Informed consent. When participants arrived for the video review, they were greeted by a research assistant. The informed consent form (Appendix N) was reviewed with the group as a

whole. Participants were informed that participation would involve viewing two brief video compilations and completing a short questionnaire related to the videos.

Video review. Participants were eligible to register for one of four available time slots, with a maximum group size of 20 per timeslot. Participants in timeslot 1 and 3 viewed a 6-minute compilation of the I-sharing interviews, followed by a 6-minute compilation of the no I-sharing interviews. Participants in timeslots 2 and 4 viewed a 6-minute compilation from the no I-sharing interviews followed by a 6-minute compilation from the I-sharing interviews.

Video content. A total of 6 I-sharing and 6 no I-sharing interviews were randomly selected for use in the compilation videos. Video compilations began with footage of the introductory preamble (Appendix Hb). All of the interview questions were included in each video clip, with question 6 (“Tell me about an accomplishment you are proud of”) repeated one time in each compilation in an effort to provide participants with an example of within-group reliability of interview style. As a result of this repetition, there was a slight deviation from the original order of interview questions. All participant responses were omitted from the video clips. An average of 10 seconds of silent nonverbal responding, with occasional reflection, summary, and transition statements from the interviewer, were included after each interview question. Given the individualized nature of participant responses, the timing and content of summary and reflection statements varied between the two compilations.

Interviewer rating. Following each video compilation, participants completed a 5-item questionnaire (Appendix O) to rate their perception of the interviewer on friendliness, engagement, facial expression, warmth/genuineness, and likeableness. Items were rated on a 7-point scale where 1 represented strong disagreement and 7 represented strong agreement. The

measure demonstrated excellent reliability ($\alpha=.90$) among ratings of the I-sharing compilation and very good reliability ($\alpha=.88$) among ratings of the no I-sharing compilation.

Debriefing. At the conclusion of the session, participants were provided with a debriefing form (Appendix P) highlighting that the purpose of the video review was to determine whether there were overt differences between the interviewer's behavior in the I-sharing and the no I-sharing conditions from a previous study. Participants were provided with additional information about I-sharing and the primary study and were directed to contact the researcher with any questions.

Research Questions and Hypotheses

- 1) To what extent does I-sharing, in a simulated clinical encounter, impact early ratings of the therapeutic alliance?

Hypothesis 1: Participants who I-share with the interviewer will rate the alliance as stronger, based on the experimenter-generated therapeutic alliance measure, than those who do not I-share with the interviewer.

- 2) To what extent does I-sharing, in a simulated clinical encounter, impact individuals' ratings of the likability of the interviewer?

Hypothesis 2: Participants who I-share with the interviewer will rate the interviewer as more likeable, based on a modification of Pinel & Long's (2012) measure of liking, than those who do not I-share with the interviewer.

- 3) To what extent does I-sharing in a simulated clinical encounter impact individuals' initial perceptions of psychotherapy?

Hypothesis 3: Participants who I-share with the interviewer will have more positive initial perceptions of psychotherapy, as measured by two experimenter-generated items, than those who do not I-share with the interviewer.

- 4) To what extent does I-sharing in a simulated clinical encounter impact participants' helping behavior related to mental health?

Hypothesis 4: Participants who I-share with the interviewer will be more likely to engage in helping behaviors related to mental health, as measured by two experimenter-generated items, than those who do not I-share with the interviewer.

- 5) To what extent does I-sharing in a simulated clinical encounter impact participants' levels of existential isolation?

Hypothesis 5: Participants who I-share with the interviewer will show greater decreases in existential isolation from the pre-interview measurement to the post-interview measurement than participants who do not I-share with the interviewer, as evidenced by a change in EIS score from pre-interview to post-interview.

- 6) To what extent does the interviewer's behavior differ between the I-sharing and no I-sharing conditions?

Hypothesis 6: There will be no significant difference between participants' rating of the interviewer's behavior in a compilation video of the I-sharing interviews and a compilation video of the no I-sharing interviews.

CHAPTER 4

RESULTS

I-Sharing and the Therapeutic Alliance

The impact of I-sharing on the Therapeutic Alliance (TA) was analyzed using an independent samples t-test to compare TA scores in the I-sharing Condition (N=21) and the no I-sharing condition (N=21). There was no statistically significant difference in TA scores between the I-sharing groups, $t(40) = -.95$, $p=.349$. In contrast to the hypothesis, individuals in the no I-sharing condition rated the therapeutic alliance ($M=6.12$ $SD=.67$) just as favorably as individuals in the I-sharing condition ($M=5.92$, $SD=.70$).

I-Sharing and Liking

The same statistical analysis (independent samples t-test) was applied to evaluate the relationship between I-sharing and Liking. There was a statistically significant difference in scores on the Liking measure between the I-sharing and no I-sharing groups, $t(40)=-2.230$, $p=.031$, with higher scores observed in the no I-sharing group ($M=5.75$, $SD=.95$) than the I-sharing group ($M=5.01$, $SD=1.16$). The effect size was medium, $d=.697$. This represents a reversal of the hypothesized relationship between I-sharing condition and ratings of Liking.

I-Sharing and Perceptions of Therapy

An independent samples t-test revealed a nonsignificant relationship between I-sharing condition and Perception of Therapy $t(40)=-.814$, $p=.421$ (no I-sharing: $M=5.88$, $SD=1.12$; I-sharing: $M=5.59$, $SD=1.14$).

I-sharing and Helping Behavior

The Helping Behavior scores were compared between the two I-sharing conditions using an independent samples t-test. In contrast to the hypothesis, individuals in the no I-sharing

condition rated themselves as more likely to engage in mental health related helping behavior ($M=5.77$, $SE=2.87$) than individuals in the I-sharing condition ($M=4.33$, $SE=2.87$), $t(40) = -3.40$, $p=.002$. The effect size was large $d= 1.05$.

I-Sharing and Existential Isolation

To examine the fifth hypothesis, pre-test and post-test EIS scores were submitted to a 2 (I-sharing Condition: I-sharing, no I-sharing) X 2 (Timing: pre-test, post-test) mixed ANOVA with repeated measures on the second factor. There was no statistically significant main effect of I-sharing condition $F(1, 40) = .56$, $p = .45$. However, the main effect of Timing showed a statistically significant decrease in EIS scores between pre-test and post-test $F(1,40) = 22.48$, $p<.001$, regardless of I-sharing condition. The effect size was large $\eta^2=.37$. The mean decrease in ratings of Existential Isolation was $M=.57$ in the No I-sharing condition and $M=.64$ in the I-sharing condition. Contrary to prediction, there was no statistically significant interaction between I-sharing condition and Timing $F(1, 40)=.07$, $p=.78$.

Interviewer Behavior

Ratings of interviewer behavior were assessed using a 2 (Viewing Group: I-sharing first, no I-sharing first) X 2 (I-sharing Video: I-sharing, no I-sharing) mixed ANOVA with repeated measures on the second factor. A main effect of I-sharing Video emerged, where participants rated the no I-sharing video ($M=6.33$, $SE=.08$) more favorably than the I-sharing video ($M=6.01$, $SE=.12$), $F(1, 57) = 10.74$, $p=.002$. A main effect of the between participants factor, Viewing Group, was observed $F(1, 57)=7.55$, $p=.008$, such that participants gave overall higher ratings to the videos in the I-sharing video first condition ($M = 6.36$, $SE = .13$) than in the No I-sharing video first condition ($M = 5.87$, $SE = .12$). There was no statistically significant interaction between Viewing Group and I-sharing Video $F(1, 57)=.35$, $p=.55$.

Ancillary Analyses

In addition to the main analyses described above, the data also allowed for an investigation of several additional questions of interest. These analyses focused on the role of Existential Isolation as a moderating variable, the impact of Existential Isolation as a predictor of the four main dependent measures, the interaction between Gender and I-sharing condition on the four dependent measures, and the relationship between Gender and Existential Isolation in both the interview sample and the initial sample. Selection of additional analyses was based upon questions of interest in the I-sharing literature.

Initial Existential Isolation as a Moderator

It was considered that pre-test levels of existential isolation might moderate the effect of I-sharing condition on the key dependent measures (TA, liking, perceptions of therapy, and willingness to help). In particular, previous research indicates that people who are high in existential isolation might be especially moved by an I-sharing experience (Pinel & Long, 2012), which raises the possibility that, in the current research, the I-sharing manipulation might have impacted people high in existential isolation more so than those low in existential isolation. Because of the continuous nature of the existential isolation measure, a series of regression analyses were performed to examine this possibility. Each regression analysis included the following predictors: a) I-sharing condition, b) the existential isolation measure, and c) the interaction between I-sharing condition and existential isolation. A separate regression analysis was performed for each of the four main dependent measures. A statistically significant interaction term would have indicated that existential isolation was moderating the effect of I-sharing condition. However, the interaction term was not statistically significant for any of the four dependent measures (p 's > .27).

Initial Existential Isolation as a Predictor

Previous research has demonstrated differential responding on variables related to prosocial behavior, interpersonal connectedness, and liking among individuals with high levels of Existential Isolation (Pinel, Bernecker, & Rampy, 2015; Pinel & Long, 2012). It was considered that pre-test levels of Existential Isolation could predict scores on the dependent variables of interest (TA, Liking, Perceptions of Therapy, and Helping Behavior). To test this possibility, initial EIS score was used as a predictor in linear regression models for each of the primary dependent measures. Initial EIS was not a statistically significant predictor of Liking, Perceptions of Therapy, or Helping Behavior (p 's > .14); however, the linear regression model established initial EIS score as a near-significant predictor of ratings of the TA ($\beta = -.29$, $t = -1.96$, $p = .057$). Participant's TA score is predicted by the equation $TA = 6.026 - .225(EIS)$. Initial EIS score accounted for 8.8% of the variation in TA. An inverse relationship was observed such that as EIS increases, TA decreases.

Gender Influences

Research on Existential Isolation has consistently demonstrated higher levels of Existential Isolation in males than in females (Costello, 2017; Helm, Rothschild, Greenberg, & Croft, 2018). Given the body of I-sharing research linking Existential Isolation to differential responding on outcomes of interest, it was considered that interactions with Gender may contribute to the primary findings observed in this study.

Gender differences in EI. In the initial sample of 289 participants, an independent samples t-test revealed that male participants' EIS scores ($M = 4.05$, $SD = .877$) were significantly higher than female participants' scores ($M = 3.74$, $SD = .876$), $t(287) = 3.06$, $p = .002$. The effect size was small $d = .35$.

Interaction with gender on primary dependent measures. A series of factorial ANOVAs with I-sharing condition and Gender as between participants factors revealed no significant main effects of Gender (p 's $>.558$) on any of the primary dependent measures (TA, Liking, Perceptions of Therapy, Helping Behavior). As was stated in the primary results section, significant main effects of I-sharing Condition were observed on the Liking ($F(1,38)=5.21$ $p=.028$) and Helping ($F(1,38)=12.470$, $p=.001$) variables, where in both cases individuals in the no I-sharing condition generated higher scores. There were no significant interactions between Gender and I-sharing Condition on the primary dependent measures (p 's $>.3$).

Interaction with gender on existential isolation. In order to assess for interactions with Gender and Existential Isolation, pre-test and post-test EIS scores were submitted to a 2 (I-sharing Condition: I-sharing, no I-sharing) X 2 (Gender: Male, Female) X 2 (Timing: pre-test, post-test) mixed ANOVA with repeated measures on the third factor. The main effect of Gender was marginally significant $F(1,38)=3.59$, $p=.066$; however, a medium effect size was achieved $\eta^2=.08$. Male interview participants reported higher levels of EI ($M=3.8$, $SE=.20$) than female interview participants ($M=3.2$, $SE=.24$). The main effect of Timing remained statistically significant $F(1,38)=22.82$ $p <.001$, and the main effect of I-sharing condition still was not statistically significant $F(1, 38)=1.18$, $p=.284$. There was no statistically significant three way interaction between I-sharing condition, Gender, and Timing $F(1, 38)=1.45$, $p=.236$. There were no statistically significant two way interactions (Timing*I-sharing Condition: $F(1, 38)=.27$, $p=.603$; Timing*Gender: $F(1, 38)=.23$, $p=.633$), indicating that EIS scores decreased equally in the two I-sharing conditions and in male and female participants from pre-test to post-test.

CHAPTER 5

DISCUSSION

Overview of Research Goals

The study of psychotherapy has been limited by the historical division between clinical psychology and social psychology (Pinel & Constantino, 2003; Snyder & Forsythe, 1991). Over the last quarter century, efforts have been made to integrate clinical and social research in order to enhance the understanding of interpersonal and intrapersonal processes, including psychotherapy. Pinel, Bernacker, and Rampy's (2015) paper, *I-sharing on the Couch: On the Clinical Implications of Shared Subjective Experience*, is an example of this integration. The authors suggest that the social psychology construct *I-sharing* may play a role in enhancing the therapeutic alliance, ultimately enhancing psychotherapy outcomes. *I-sharing* refers to the subjective sensation that one has had the same in-the-moment experience as another person (Pinel et al., 2006). Common examples of *I-sharing* cited in the literature include saying the same thing at the same time as another individual, displaying the same affective expression as a partner (such as smiling or laughing at the same time), and engaging in an identical behavior in response to a stimulus (such as dancing to the same song or cheering at the same point in an athlete's performance or a politician's speech). When *I-sharing* has been manipulated in social psychology research, *I-sharing* with an ostensible partner has consistently been linked with increased feelings of interpersonal connectedness, decreased existential isolation, increased prosocial and relationship building behavior, as well as positive impacts on relationships beyond the initial *I-sharing* encounter (Pinel et al., 2006; Huneke & Pinel, 2016; Johnson, Pinel, & Long, 2014, as cited in Pinel, Bernecker, & Rampy, 2015; Pinel, Long, & Huneke, 2015; Pinel, Long, Johnson, & Yawger, 2018). Pinel, Bernacker, and Rampy (2015) suggest that *I-sharing* may

impact psychotherapy through the therapeutic alliance, empathy, nonverbal mirroring, and therapist self-disclosure. The current study aimed to serve as an experimental follow-up to Pinel, Bernacker, and Rampy's theoretical paper by using a novel method to manipulate I-sharing in a face-to-face simulated therapy encounter, and subsequently examining the impact on ratings of the therapeutic alliance, liking for the therapist, perceptions of psychotherapy, willingness to help in mental health contexts, and feelings of existential isolation.

Overview of Research Findings

Each of the primary findings are reviewed in the following section. Interpretations of the results are offered, along with parallels to the existing research and recent findings. A discussion of the methodological and interpretive limitations of this study are reviewed in the Limitations section, followed by Future Directions for both Research and Clinical domains.

The Therapeutic Alliance

Based upon the demonstrated relationship between I-sharing and increased feelings of interpersonal connectedness, the first hypothesis asserted that individuals who I-shared with the interviewer would report higher ratings of the therapeutic alliance following the simulated clinical interview. The current study revealed no significant difference in ratings of the therapeutic alliance between individuals in the I-sharing condition and individuals in the no I-sharing condition. In ancillary analyses, the inclusion of gender as an additional independent variable revealed no significant main effect of gender or interaction between I-sharing condition and gender on ratings of the therapeutic alliance. Moderation analyses revealed that participants' initial levels of existential isolation did not moderate the effect of I-sharing condition on ratings of the therapeutic alliance.

However, existential isolation did emerge as a near statistically significant predictor of ratings of the therapeutic alliance, such that higher existential isolation scores predicted lower ratings of the therapeutic alliance. This finding is clinically relevant as it suggests that measurement of baseline levels of existential isolation may help to elucidate a potential barrier to alliance formation. The results of the current study are also consistent with recent research demonstrating negative correlations between existential isolation and individuals' plans to engage in therapy, their perception of their provider's expertise, and their overall satisfaction with psychotherapy (Constantino, Sommer, Goodwin, Coyne, & Pinel, 2019). The findings in the current study, taken in conjunction with the association between increased existential isolation and poorer psychological and physical health outcomes (Long, Pinel, Park, Costello, & Daily, 2019), suggest that measurement of existential isolation at the initiation of a therapeutic relationship could help to alert providers to potential pitfalls in the therapeutic relationship as well as prospective areas for clinical intervention.

Liking

The second hypothesis predicted that liking for the interviewer would be higher in the I-sharing condition than in the no I-sharing condition. Unexpectedly, participants in the no I-sharing condition rated their liking for the interviewer significantly higher than participants in the I-sharing condition. This represents a reversal of the most universally replicated finding in I-sharing research (Pinel, Bernacker, & Rampy, 2015), and it held consistent when gender was considered as a moderator, and when existential isolation was considered as a moderator. Additionally, ratings of liking were not significantly predicted by initial ratings of existential isolation. While this finding may be explained in part by the results of Part 3 of the study, which indicate that third party reviewers rated the interviewer more favorably in the no I-sharing

interviews than the I-sharing interviews, it is also possible that other constructs associated with interpersonal connection may have influenced the results. Specifically, in the no I-sharing condition, participants' impressions of the interviewer may have been influenced by the interviewer's disclosure of what she saw in the inkblots.

Literature on the impact of self-disclosure in therapy provides mixed results (Henretty, Currier, Berman, & Levitt, 2014; Levitt et al, 2016). Some studies suggest that therapist self-disclosure can positively influence therapeutic rapport, while other research touts the potential harm that may come from inappropriate disclosures (Levitt et al, 2016; Howe, 2003). However, research on the relationship between self-disclosure and *liking* has consistently demonstrated that increased disclosure is associated with increased ratings of likability and feelings of closeness (Sprecher, Treger, & Wondra, 2012; Collins & Miller, 1994). In the current study, participants in the no I-sharing condition were exposed to an element of self-disclosure as the interviewer provided not only a discordant statement about what was seen in the card (e.g. "I don't quite see that") but also offered an alternative interpretation of what was displayed on the card. In the I-sharing condition, the researcher merely offered a statement of agreement. This methodology was selected in order to mirror the protocol in Huneke & Pinel's (2016) research, where individuals saw their ostensible partners' responses to the inkblot task, including their partners' specific responses when they did *not* make the same choice as the participants. It is possible, though, that this methodology introduced a confound of self-disclosure into the research design, as participants in the no I-sharing condition may have perceived that they were receiving additional information about the interviewer, and this type of disclosure has been associated with increased ratings of liking in previous research (Sprecher, Treger, & Wondra, 2012; Collins & Miller, 1994).

The Liking finding can also be interpreted by exploring the possibility that the I-sharing manipulation did not function as intended in this study. The reversal of the anticipated result could be interpreted as an indication that the inkblot task did not create a sense of shared subjective experience between the participants and the interviewer, and subsequently did not induce the expected increase in ratings of Liking. Further, it is possible that instances of I-sharing that occurred within the interviews themselves rather than solely within the inkblot task may have overshadowed the inkblot manipulation of I-sharing. The challenges in interpreting these results are discussed within the context of limitations of the selected methodology in the section that follows.

Though this finding represents a reversal of the hypothesized result, it is interesting to note the discrepancy between the liking and therapeutic alliance results. While a statistically significant difference between the I-sharing and no I-sharing condition emerged on the liking measure, no difference emerged on the therapeutic alliance measure. This helps to delineate that liking and the therapeutic alliance are separate constructs and supports the assertion that liking one's provider is not the sole contributor to creating an effective working alliance (Hatcher & Berens, 2006).

Perceptions of Psychotherapy

The third hypothesis concerned the effect of I-sharing condition on perceptions of the value of therapy. No differences in perceptions of therapy emerged between the I-sharing and no I-sharing conditions. The inclusion of gender and existential isolation as additional independent variables did not modify the findings. Ratings of existential isolation did not significantly predict perceptions of psychotherapy. It is noteworthy that perceptions of psychotherapy were operationalized with just two items in the current study, which may help to explain the

discrepancy with Constantino et al.'s (2019) finding that existential isolation is negatively correlated with intention to seek therapy. Neither of the items used here specifically addressed the issue of intention to seek therapy, and it is possible that the items as written did not adequately capture the construct of perceptions of psychotherapy.

Helping Behavior

The fourth hypothesis predicted that individuals in the I-sharing condition would be more likely to engage in helping in mental health contexts than individuals in the no-I sharing condition. The findings in this study run counter to the hypothesis and to the published finding that individuals who I-share with an ostensible partner exhibit an increased likelihood of engaging in helping and prosocial behaviors (Pinel, Long, & Huneke, 2015; Pinel et al., 2018), as participants in the no I-sharing condition rated their likelihood of engaging in helping behaviors related to mental health as significantly higher than individuals in the I-sharing condition. Inclusion of gender and existential isolation as additional independent variables did not modify the relationship between I-sharing condition and ratings of helping behavior, and existential isolation did not serve as a significant predictor of helping behavior.

It is noteworthy that individuals in the no I-sharing condition also rated their liking for the interviewer higher than individuals in the I-sharing condition. Previous I-sharing research has shown that I-sharing increases both liking and helping, but it is not clear whether these are independent effects, or whether liking mediates the relationship between I-sharing and helping (Huneke & Pinel, 2016; Pinel et al., 2018). It is possible that the reason participants' willingness to engage in helpful behaviors was higher among no I-sharing participants is because helping behavior shares a positive relationship with scores on the liking measure. Perhaps liking someone leads to increases in helping, even toward others beyond the person one likes. There

could be a direct effect of liking on helping, or perhaps an indirect effect through a pathway such as positive mood, which has been shown to increase helping (Carlson, Charlin, & Miller, 1988). Future research may help to disentangle these possibilities.

Existential Isolation

The fifth hypothesis predicted that individuals in the I-sharing condition would demonstrate a greater decrease in ratings of existential isolation from pre-intervention to post-intervention than individuals in the no I-sharing condition. Contrary to prediction, there was no difference in mean decreases in existential isolation between the I-sharing conditions. However, participants in both groups showed statistically significant decreases in existential isolation from pre-intervention to post-intervention. Though it is possible that the decrease in existential isolation may have stemmed from environmental changes that occurred outside the study, previous research on existential isolation in college students revealed that ratings of existential isolation did not naturally decrease over the course of the academic semester (Costello, 2017), suggesting that the decrease in existential isolation that was observed in the current study may be related to participation in the experiment. In both of the I-sharing conditions, participants interacted with an interviewer who displayed supportive therapy techniques. That a decrease in existential isolation was observed in both conditions provides support for the notion that involvement in psychotherapy may serve as a means to decrease feelings of existential isolation. Because existential isolation is related to detrimental psychological outcomes (Long et al., 2019), reducing it may have a wide range of positive outcomes including improved social functioning, decreased risk for anxiety and depression, and improved physical health.

When the potential impact of gender on ratings of existential isolation was considered in ancillary analyses, two interesting findings emerged. First, there was a marginally significant

main effect of gender on existential isolation, with males reporting higher levels of existential isolation than females. Second, an analysis of the initial group of 289 research participants demonstrated a statistically significant difference in existential isolation, with male participants reporting higher levels than female participants. These findings are consistent with the existing research on gender and existential isolation, which indicates that males are higher in baseline existential isolation than females (Costello, 2017; Helm, Rothschild, Greenberg, & Croft, 2018; Pines, Long, Murdoch, & Helm, 2017). Taken in conjunction, these findings serve as replications of the existing research on differential levels of existential isolation in males and females and may have important implications for clinical work. With the release of the APA's *Guidelines for Clinical Practice for Boys and Men* (2018), it is clear that patients and practitioners alike are seeking tools to support effective engagement of males in psychological care. The well-replicated finding that men report higher levels of existential isolation than women may be of use in expanding the provision of effective mental health services for men and tailoring interventions to enhance opportunities for feelings of connectedness.

Interviewer Behavior

The final hypothesis predicted that a novel group of participants would rate the interviewer equally favorably in the I-sharing condition and the no I-sharing condition, after watching video compilations of the two sets of interviews. As noted above, though, these novel participants, who were not involved in Part 1 or Part 2 of the study, rated the interviewer more favorably in the no I-sharing video compilation than in the I-sharing video compilation. Though the difference in ratings was subtle, this finding may explain why individuals in the no I-sharing condition liked the interviewer more and reported a greater willingness to engage in helping behaviors related to mental health than individuals in the I-sharing condition.

One possible explanation for viewers' differing ratings of the two video compilations may stem from the individualized nature of the interviewees' responses to the interview prompts. It was not feasible to generate identical summarizing and reflecting statements in each interview. Doing so would have detracted significantly from the genuineness and warmth of the interviews, both of which are associated with the therapeutic alliance (Norcross & Lambert, 2011). It is plausible that differences in the frequency of utilization of supportive therapy skills in the I-sharing vs no I-sharing interviews may have contributed to the perception that the interviewer was more likeable in the no I-sharing videos. Another possible explanation for viewers' differing ratings of the two video compilations could involve differential behavior on the part of the interviewer. It is possible that the interviewer unwittingly behaved in a friendlier way in the no I-sharing condition to compensate for not I-sharing with that group. The possibility that experimenter biases may have contributed to the findings cannot be ignored, and the perception that the interviewer's behavior differed between the two groups represents one of the most notable limitations of this study.

Limitations

The current study had several important methodological limitations, the first of which relates to the very construct that is being studied. While the concept of I-sharing is well defined and has been operationalized thoroughly and consistently in social psychology research, the actual experience of I-sharing is subjective. As Pinel and her colleagues have aptly pointed out in their writings on this topic, I-sharing is an inference that cannot be directly observed (Pinel et al., 2004; Pinel et al., 2006; Pinel & Long, 2012). However, these I-sharing inferences could be measured with appropriate questions. This study did not include a measure of the extent to which participants felt like they were I-sharing with the interviewer. It is possible that the I-sharing

manipulation utilized in this study did not induce the target response. The I-sharing task used in this research is based upon existing I-sharing manipulations, which utilize simultaneous and identical responding from the I-sharing partner, and often include novel stimuli that the participants do not generally encounter in day-to-day life (e.g. inkblots, the Imaginiff game) so as to increase the sense that any identical response to that stimulus is based upon a shared in-the-moment experience rather than responding based on familiarity or past experiences (Pinel, Long, & Crimin, 2008). The substantial body of research showing the positive relationship between the I-sharing experience and increased feelings of interpersonal connectedness does strongly suggest that the manipulations used in prior I-sharing research do in fact induce I-sharing, but the existing literature, and the current study, would be improved by including a measure assessing the perception that I-sharing has occurred.

As was previously mentioned, all existing I-sharing research utilizes imaginal scenarios or computer-based interactions with an ostensible partner. This study is the first known attempt to manipulate I-sharing in a face-to-face encounter. The novel nature of this approach represents a second important limitation of this study: it is possible that the procedures used to foster I-sharing in computer-based interactions do not function the same way in in vivo exchanges. There are several potential reasons for this. First, the delivery of the I-sharing responses varies between computer-based interactions and in vivo interactions. In computer-based or imaginal scenario-based I-sharing paradigms, the researchers have the ability to ensure that responding is simultaneous and identical, which is of great import in fostering I-sharing (Pinel et al., 2006). When the same information is delivered face-to-face, it is not possible to respond identically and simultaneously outside of chance. That is perhaps what makes I-sharing feel so special when it does occur—we know that the odds of someone saying the same thing at the same time that we

do are incredibly low, hence yielding the perception that the individual is truly sharing in the same in-the-moment experience that we are. In this study, responses in the I-sharing condition required the interviewer to provide agreement on the content of the card *after* the participant's response, which differs from the near simultaneous delivery that occurs in spontaneous I-sharing and is mimicked in the computer-based and imaginal scenario-based research. Second, in computer-based I-sharing experiments, participants are unlikely to question the genuineness of their partner's responses, because the partner's responses appear on the screen only a split second after they enter their own response, their partner has no clear motivation to provide anything but their genuine interpretation of the stimuli, and contextual cues to suggest disingenuous responding are not available. But in face-to-face encounters, participants have the ability to judge the genuineness of responding. Responses in the no I-sharing condition were likely to be perceived as more genuine than those in the I-sharing condition, as the likelihood that the researcher actually agreed on any given response – much less all five – was low. Though care was taken to provide similar levels of interest and expressiveness when engaging in both conditions, the results indicate that the researcher was perceived more positively by participants in the no I-sharing condition than in the I-sharing condition. Perhaps this result occurred because participants perceived the researcher as more genuine in the no I-sharing condition. Additionally, as was discussed previously, the inclusion of the researcher's alternate response in the no I-sharing condition added the potential confound of self-disclosure, which may have influenced the results. It is possible that this type of disclosure is perceived differently in face-to-face exchanges than in computer-based interactions; it may be considered more valuable in the in-person interaction and thus more likely to foster liking (Collins & Miller, 1994). Finally, the possibility exists that I-sharing simply cannot be manipulated in face to face interactions. The

use of pilot studies on in vivo I-sharing exchanges is discussed in the Future Directions section as a potential tool to explore how, and under what circumstances, I-sharing can be induced in face to face interactions.

Another important limitation comes from the possibility that the interviewer exhibited a bias that led her to behave in a friendlier way in the no I-sharing condition than in the I-sharing condition. Several factors point to this possibility, including the non-blind nature of the experimental design, the reversal of expected findings (e.g. participants liked the interviewer more in the no I-sharing condition than in the I-sharing condition), and the third party raters' impression of the interviewer as more favorable in the no I-sharing compilation video than in the I-sharing compilation video. It is possible that the interviewer behaved in subtly more positive ways when interacting with participants in the no I-sharing condition in an unconscious effort to compensate for the lack of the I-sharing experience. Alternatively, it is possible that participants in the no I-sharing condition changed their behavior to be more talkative, engaged, and responsive in the interview because they liked the interviewer more as a result of the disclosure, prompting the interviewer to mirror their level of engagement (Sprecher, Treger, & Wondra, 2012; Elliot, Bohart, Watson, & Greenburg, 2011). The lack of standardized responses outside of transition statements (see Appendix J) may also have contributed to the more positive impression of the interviewer in the no I-sharing condition; however, as was mentioned above, the utilization of standard responses impedes genuineness and warmth, both of which are essential components of the therapeutic alliance (Bordin, 1979). The decision to emphasize external validity and potential generalizability of the findings does compromise internal validity. This subsequently leads to challenges in interpreting the findings. Regardless of whether the difference in the interviewer's presentation was driven by experimenter bias or by participant reactivity, the fact

remains that an observable difference was noted in the interviewer's behavior between I-sharing conditions, and this poses a major limitation to the study. Future research may benefit from utilization of a method that allows for a more standardized interview style to increase internal validity.

The type of fidelity check utilized in this research also represents a limitation to the interpretation of the results. The use of behavior checklists, interview transcribing, and trained-rater review are among the strategies frequently utilized in research on psychotherapy treatment fidelity research (Horner, Rew, & Torres, 2006). The method utilized in the current study instead emphasizes ratings of the warmth and likability of the interviewer (see Appendix O) by untrained observers. Likability is a central concept of interest in existing I-sharing research (Pinel, Beracker, & Rampy, 2015) and warmth is a major component of the alliance (Hubble, Duncan, & Miller, 1999; Norcross & Lambert, 2011). The selected fidelity check offered an opportunity to detect subtle differences in laypersons' perceptions of the interviewer's friendliness, level of engagement, facial expression, warmth, and likability. A fidelity check utilizing trained reviewers and more comprehensive scope might have enhanced the internal validity of the research and further clarified the interpretations of the reversal of the expected finding on Liking. Future researchers may benefit from inclusion of a more rigorous fidelity check.

In addition to the aforementioned major limitations, the study design and subsequent interpretation of results is limited by other factors including the small sample size, possibility of history effects, and possibility of testing effects. With a sample of just 42 participants, the results of this study must be interpreted cautiously due to the increased margin of error and limited power of the study. Regarding potential history threats, the initial measurement of existential isolation occurred approximately one month before the interview and completion of the post-

interview measures. It is possible that factors outside of the interview procedure may have influenced participants' pattern of response. The time between Part 1 and Part 2 of the study varied for each participant, and it was not recorded as a variable. Though previous research with college students has demonstrated that levels of existential isolation remain stable over the course of the semester (Costello, 2017), the potential that participants' responses may have been influenced by unmeasured variables remains. With regard to testing threats, it is possible that exposure to the existential isolation measure in Part 1 of the study may have led participants to respond differently to it in Part 2 than they otherwise would have.

Future Directions

The current study had three notable strengths. First, it represented a novel attempt to study the effect of I-sharing in a face-to-face simulated clinical encounter on several measures deemed important in psychotherapy and social psychology research. This is a major contribution to the existing literature, as it is the first known attempt to induce I-sharing in a face to face interaction and provides useful directions for researchers who seek to explore how I-sharing may function in the clinical context. Second, it allowed for a replication of the finding that men report higher levels of existential isolation than women (Helm et al., 2018; Pinel et al., 2017). Finally, this study provided new information about the relationship between existential isolation and ratings of the therapeutic alliance, and it pointed to the possibility that therapeutic interactions may reduce existential isolation. Although the primary hypotheses related to the impact of I-sharing on the therapeutic alliance, liking, perceptions of therapy, and helping behavior were not confirmed by this study, the research offers a starting point for future clinically-focused I-sharing research.

This study was limited by the non-blind design, which allowed for the possibility of some degree of experimenter bias. Future research could correct for this concern by utilizing a double-blind design, where the interviews are conducted by a clinician not involved in the primary research design, and the interviewer is not informed of the purpose of the I-sharing task or the anticipated outcomes. Blinded studies are the gold standard in clinical trials (Misra, 2012), and the addition of masking to in vivo I-sharing research may produce stronger evidence for cause-effect relationships between I-sharing and variables of clinical interest.

Recruitment of a larger sample of participants would expand the statistical power of future clinically-focused I-sharing research. Future research in this area would also benefit from drawing upon a genuine help-seeking population (e.g. psychotherapy clients) in order to enhance the generalizability of the findings to the most relevant group, and to assess the impact of I-sharing on the therapeutic alliance in a more clinically representative sample. Further research endeavors could utilize an I-sharing manipulation task prior to conducting a psychotherapy intake to assess for impact of the manipulation on early ratings of the alliance. As was previously discussed, the interview itself could be enhanced by the development of scripts that convey empathy and warmth in order to enhance fidelity to protocol and increase internal validity. The utilization of a treatment seeking population may allow for further standardization of the interview element of the research. Conducting research with individuals involved in psychotherapy would also allow for the inclusion of long-term follow-up investigations, an element that is lacking from the current study, as well as from I-sharing research as a whole.

One of the limitations in this study is the possibility that the selected I-sharing procedure did not function in the same fashion in a face-to-face encounter as it has in previous computer-based and imaginal scenario-based studies. Future research could make use of a pilot study to

evaluate different I-sharing procedures in order to select the most appropriate method for fostering I-sharing in an in-person encounter. Moreover, the use of pilot studies to evaluate different I-sharing methods would not only benefit I-sharing research in the clinical realm but would also offer a valuable expansion of the existing body of I-sharing literature.

Finally, the refinement of dependent variables for use in clinically-based I-sharing research, and inclusion of well-validated and reliable measures, would help to enhance the clinical utility and generalizability of research findings. The researcher-generated measures in this study demonstrated good to excellent reliability; however, the use of dependent measures designed for utilization in psychotherapy outcome research may be of greater benefit in evaluating the clinical utility of fostering I-sharing between a client and clinician. Additionally, dependent measures related to specific mental health concerns, such as depression or anxiety, could be incorporated into future study designs to allow researchers to evaluate whether I-sharing functions differently in individuals struggling with mental health concerns, and whether I-sharing modifies the therapeutic alliance in these cases.

Coming Back to the Couch: Clinical Applications

While the current study did not provide evidence of a positive relationship between patient-provider I-sharing and the therapeutic alliance, several of the findings in this study provide useful information for clinical practice. In reviewing these findings, it is important to note that the interview utilized for the research did not constitute a genuine clinical interaction, thus the potential clinical applications of the results represent a translation in concept rather than specific clinical findings. Nonetheless, there is useful information to be gained from the current study.

The most clinically informative findings in the present research relate to the construct of existential isolation, which was shown to differ at baseline between males and females, to negatively predict ratings of the therapeutic alliance, and to decrease in response to the simulated therapy encounter regardless of I-sharing condition. Though the I-sharing manipulation utilized in this study did not facilitate increased ratings of the therapeutic alliance, I-sharing has consistently been shown to decrease feelings of existential isolation in other research (Pinel et al. 2004; Pinel et al., 2006; Pinel, Bernacker, & Rampy, 2015; Pinel et al., 2018). When the existing I-sharing research on existential isolation is considered in conjunction with the findings on existential isolation and the therapeutic alliance in this study, it stands to reason that I-sharing, when effectively achieved in psychotherapy, could serve as a tool to strengthen the alliance, particularly among individuals higher in existential isolation.

The finding that men are more existentially isolated than women has been consistently replicated (Costello, 2017; Helm et al., 2018; Pinel et al., 2017). Recent studies suggest that increased existential isolation in male respondents may relate to their tendency to place decreased emphasis on communal values like warmth, affection, and compassion (Helm, Rothschild, Greenberg, & Croft, 2018). Notably, these values are among the very same elements that are considered central to the therapeutic alliance (Norcross & Lambert, 2011). With these findings in mind, it stands to reason that men may benefit from different strategies to foster the therapeutic alliance than women. I-sharing may provide a unique means to strengthen the therapeutic alliance with male patients because it represents a chance to build increased feelings of interpersonal connectedness without focusing on communal values (Pinel, Bernacker, & Rampy, 2015). The APA's *Guidelines for Clinical Practice for Boys and Men* (2018) suggests that men may be hesitant to enter into mental health treatment to begin with because of the

perception that psychotherapy is a “feminine” activity. By selecting means to foster the alliance that are not solely based in communal values, clinicians may be able to engage men more effectively in treatment. Pinel, Bernacker, & Rampy (2015) suggest that jointly engaging in experiences that produce predictable shared responses may provide an opportunity to generate I-sharing experiences. They propose that joint physical activities as part of psychotherapy, or use of games within the session, may function as a tool to support the perception of a shared subjective experience between patient and provider, as individuals commonly respond to these stimuli in a similar fashion. Perhaps coincidentally, these techniques are commonly used in the military setting, where therapeutic interactions may occur over the course of early morning physical training or a friendly game of chess in an effort to accommodate challenging schedules and to combat stigma related to help-seeking (Kennedy & Johnson, 2009). Specific use of game-based and shared-activity based interventions in therapy with male clients may help to increase opportunities for I-sharing and in turn may enhance feelings of interpersonal connectedness and decrease feelings of existential isolation.

Similarly, research on inside jokes (Mayo & Long, 2016) demonstrated that creation of an inside joke increased liking for the partner, increased perceptions of similarity with the partner, and also reduced participants’ feelings of existential isolation. It is hypothesized that inside jokes function as an I-sharing experience that can be revisited time and time again to enhance feelings of connectedness between partners. While the creation of an inside joke is not something that will inherently occur within the therapeutic context, there are elements of the psychotherapy process that may function similarly. For example, the use of analogy and metaphor is a common practice within certain forms of psychotherapy (Killick, Curry, & Myles, 2016). Much like inside jokes, when metaphor is used effectively in therapy, it provides a sense

of shared understanding to refer back to in future sessions. It is possible that metaphor could be a tool to create shared subjective experiences between clients and clinicians.

In the current research, for both male and female participants, existential isolation scores were found to negatively predict ratings of the therapeutic alliance. This suggests that clinicians may face an increased challenge when working with individuals high in existential isolation, regardless of gender. Existential isolation represents a unique construct that is related to, but distinct from, loneliness, social isolation, anxiety, and depressive concerns. Items on the measures commonly used for outcome measurement in psychotherapy may tap into the construct of existential isolation, but do not capture it fully. The findings in this study provide support for the idea of using the EIS as an outcome measure in therapy. At baseline, the EIS may serve to inform clinicians about a potential barrier to alliance formation. With ongoing treatment, changes in the EIS may help to provide an additional monitor for therapy efficacy and the development of the therapeutic relationship.

Ultimately, one of the most meaningful findings in the current research comes from the observation that participation in a psychotherapy-based encounter was associated with decreases in ratings of existential isolation. The value of the alliance in psychotherapy outcomes has been repeatedly referenced in this paper and serves as a foundation for the suggestion that I-sharing may be of utility in the clinical context (Pinel, Bernacker, & Rampy, 2015). The current study provides indirect evidence that engaging in a therapy-related task helps to decrease feelings of existential isolation, and by extension may decrease the risk for negative mental and physical health outcomes associated with higher levels of existential isolation (Long et al., 2019). In essence, this study provides yet another indication that *therapy works* and that meaningful

changes can occur as a result of talk-based interactions and engagement in psychotherapeutic processes.

Conclusion

This study was designed to serve as an experimental follow-up to Pinel, Bernacker, and Rampy's (2015) paper outlining the potential benefits of I-sharing in clinical encounters. I-sharing, which refers to the subjective sense that one has had the same in-the-moment experience as another individual, has been linked to increased feelings of interpersonal connection, positive relationship behaviors, decreased feelings of existential isolation, and improved social functioning in relationships beyond the initial experimental encounter (Johnson, Pinel, & Long, 2014 as cited in Pinel, Bernacker, & Rampy, 2015; Pinel et al., 2006; Pinel & Long, 2012; Pinel, Long, & Huneke, 2015; Pinel et al., 2018). This study is the first known attempt to facilitate I-sharing in a face-to-face encounter. Though the primary hypothesis that I-sharing would increase ratings of the therapeutic alliance was not borne out in this research, several important findings emerged. This research replicated the finding that existential isolation is higher among men than women, which offers useful insight in the context of the emerging focus on the treatment of men and boys in mental health settings. Additionally, a negative relationship between existential isolation and ratings of the therapeutic alliance was observed. There is value to expanding upon this finding in future research as a tool for better understanding variations in the therapeutic alliance, as well as strategies for fostering the alliance. Finally, the finding that participants' ratings of existential isolation decreased following participation in the simulated clinical encounter provides support for the value of psychotherapy overall. This study provides a clear example of the benefit of a unified approach to studying psychological phenomena and

represents an effort to combine clinical and social psychology research in order to further both research and clinical goals.

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Appendix A

Informed Consent Form 1

Assisting with Clinical Interview Skills Informed Consent Form

We are seeking participants to assist a graduate student with clinical interviewing skills. If you agree to participate, you will be asked to answer a brief online questionnaire. The items will take less than 10 minutes to complete. This study has an in-person follow up component worth 1.0 research credits. Completion of the online portion of the study is required in order to enroll in part two of the study.

The answers that participants provide in this study will be linked to a participant ID number. At the end of the study, all participants' responses will be compiled and examined together. In other words, the responses that participants provide will be considered only in combination.

There are no known risks associated with participating in this study. However, participants may find the study interesting and may learn more about how psychological research is conducted.

Your participation in this study is completely voluntary. You may choose not to participate, in which case you should exit the study and close your web browser. If you do choose to participate, you may withdraw at any time by exiting the study and closing your web browser. You may also leave blank any question that you would prefer not to answer.

Participation in the session today is worth 0.5 research credits. If you would prefer not to participate in this research study, research credits may be earned instead by participating in other research studies and/or reading and reviewing scientific articles. To obtain the full 1.5 credits for this study, you must also complete the in-person follow up. Participation in the online portion of the study does not constitute consent to participate in the in-person follow up. A second informed consent process will be completed prior to part II of the study. If you choose not to complete the in-person portion of the study, your questionnaire responses will be deleted.

If you have any questions about this research, you may contact the experimenter, Julia von Heeringen, at j.e.vonheeringen@iup.edu. You may also contact the project advisor, Dr. Anson Long, by email at anson.long@iup.edu or by phone at 724-357-4523.

This study has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (phone: 724-357-7730).

If you are willing to participate in this study, please click below to begin the study.

Thank you for participating in this online survey!

Appendix B

Demographic Questions

1. What is your age? _____ (Please note that you must be age 18 or older to participate)
2. What is your gender?
 - a. Male
 - b. Female
 - c. Transgendered
3. What is your race/ethnicity?
 - a. African American/Black
 - b. European American/White
 - c. Latina/Latino/Hispanic
 - d. Native American/Alaska Native
 - e. Asian/Pacific Islander
 - f. Biracial (please specify) _____
 - g. Other (please specify) _____

Appendix C

Existential Isolation Scale

INSTRUCTIONS: Please rate the extent to which you agree or disagree with each of the following statements:

	0-----	1-----	2-----	3-----	4-----	5-----	6-----	7	
	Strongly Disagree								Strongly Agree
1. I usually feel like people share my outlook on life.....	1	2	3	4	5	6	7		
2. I often have the same reactions to things that other people around me do.....	1	2	3	4	5	6	7		
3. People around me tend to react to things in the environment the same way I do.....	1	2	3	4	5	6	7		
4. People do <u>not</u> often share my perspective.....	1	2	3	4	5	6	7		
5. Other people usually do <u>not</u> understand my experiences.....	1	2	3	4	5	6	7		
6. People often have the same “take” or perspective on things that I do.....	1	2	3	4	5	6	7		

Pinel, E. C., Long, A. E., Murdoch, E. Q., & Helm, P. (2017). A prisoner of one's own mind:

Identifying and understanding existential isolation. *Personality and Individual*

Differences, 105, 54-63. doi: 10.1016/j.paid.2016.09.024

Appendix D

Debriefing Form 1

Thank you for your participation in this portion of the study! Completing this questionnaire makes you eligible to sign up for the in-person follow up portion of the study, which involves assisting a graduate student with clinical interviewing skills. If you would like to participate in this in-person follow-up study, please visit the research participation website and look for a study called “Clinical Interviewing Skills.” Thank you for your time!

If you have any further questions about this study, please contact Dr. Anson Long (anson.long@iup.edu) or Julia von Heeringen (j.e.vonheeringen@iup.edu).

Appendix E

Debriefing Form Part 1b

You are receiving this debriefing form because you participated in an online survey study that utilized the Existential Isolation Scale and elected not to register for the in-person part of the study.

If you are interested in learning more about research on Existential Isolation, please see the following sources:

Pinel, E. C., Long, A. E., Landau, M. J., Alexander, K., & Pyszczynski, T. (2006). Seeing I to I: a pathway to interpersonal connectedness. *Journal of Personality and Social Psychology*, 90(2), 243.

Pinel, E. C., Long, A. E., Murdoch, E. Q., & Helm, P. (2017). A prisoner of one's own mind: Identifying and understanding existential isolation. *Personality and Individual Differences*, 105, 54-63.

Yalom, I. D. (1980). *Existential psychotherapy*. Basic Books.

If you have any further questions about this study, please contact Dr. Anson Long (anson.long@iup.edu) or Julia von Heeringen (j.e.vonheeringen@iup.edu).

Appendix F

Informed Consent Form 2

Assisting with Clinical Interviewing Skills Informed Consent Form

You are invited to participate in this research study. This information is provided to help you make an informed decision about whether to take part in this study. You are asked to participate in the current study because you are enrolled in the General Psychology course at Indiana University of Pennsylvania. To participate in this research study, you must be at least 18 years of age. You will be given 1 credit toward your PSYC 101 research requirement, and the interview and follow-up questionnaires will take approximately 1 hour to complete.

The current study will involve the completion of an icebreaker game followed by a brief personal interview with a psychology graduate student. Though the questions may challenge you to reflect on personal experiences, the interview does not constitute psychotherapeutic treatment of any kind. A licensed clinical psychologist will be present in the building during all interviews.

All interviews will be video recorded. Videos will be stored on a secure server at the Center for Applied Psychology, and will only be accessible to the researcher and her faculty mentors. The camera will be angled such that only the interviewer appears in the video footage. At the conclusion of data collection, the videos obtained from the interviews will be edited to create a composite video to be used in additional research. The videos will be edited such that only the interviewer's audio (e.g. the questions that she asks) will be included in the final composite. Responses from the volunteers will not be included. All original video files will be destroyed at the conclusion of the study.

The research is being conducted by this researcher, who is a psychology graduate student attending Indiana University of Pennsylvania. The information obtained from the post-interview questionnaires will be used for my research and may be presented at professional and educational conferences and meetings and/or published in journals and/or books. The information gathered will be completely confidential. No one's data will be looked at on its own; instead, everyone's data will be looked at together and examined for general themes.

Following the interview, you will complete a series of questionnaires. Demographic information will be requested in the survey with questions regarding gender, race, age, and past psychotherapy experience. You will also be asked to complete rating scales regarding your experience with the interviewer.

Voluntariness and Confidentiality

All interview responses and questionnaire data will remain confidential, with the exception of statements indicating danger to the self, danger to others, and statements providing reason to suspect the abuse of an elderly person or a child. In the event that you disclose information that breaches the aforementioned limits of confidentiality, a licensed clinical psychologist will be

made aware of the information disclosed in order to determine the appropriate course for ensuring the safety of yourself and/or others.

Your participation in this study is **voluntary**. You are free to decide whether you wish to take part in the current study. If you decide to participate, you can change your mind later and exit the study at any time by informing the researcher that you wish to withdraw, so long as the limits of confidentiality have not been breached. If you decide to leave the study before completing the questionnaires, and the limits of confidentiality have not been breached, no information related to your interview will be saved. If you choose to participate, all the information and recorded answers on the questionnaires will be confidential.

Risks/ Benefits and Compensation:

This research is of minimal risk to you. You will receive compensation in the form of 1 credit toward your PSYC 101 research requirement. Individuals who participate in the study may receive some personal benefits from their participation, as the questions posed may lead them to think about their personal reactions to various life events. If considering the interview questions brings up feelings of distress, or increases your interest in psychotherapy, the following resources are available in the area:

IUP Counseling Center	724-357-2621
IUP Center for Applied Psychology	724-357-6228
Community Guidance Center	724-465-5576
Armstrong/Indiana Crisis Hotline	724-465-2605

This research is being completed by Julia von Heeringen under the direction of Dr. Anson Long. Please contact us if you have any questions about the study.

Julia E. von Heeringen, M.A.
Clinical Psychology Doctoral Student
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240-994-9935

Anson Long, Ph.D.
Mentor and Professor of Psychology
anson.long@iup.edu
724-357-4523

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724-357-7730).

If you agree to participate in this study, print and sign your full name below, along with today's date. Please understand that your responses are completely confidential, unless the limits of confidentiality described above have been breached, and that you have the right to withdraw from the study at any time. An unsigned copy of this informed consent form will also be available for you to keep.

Participant Name (Printed)

Participant Name (Signed)

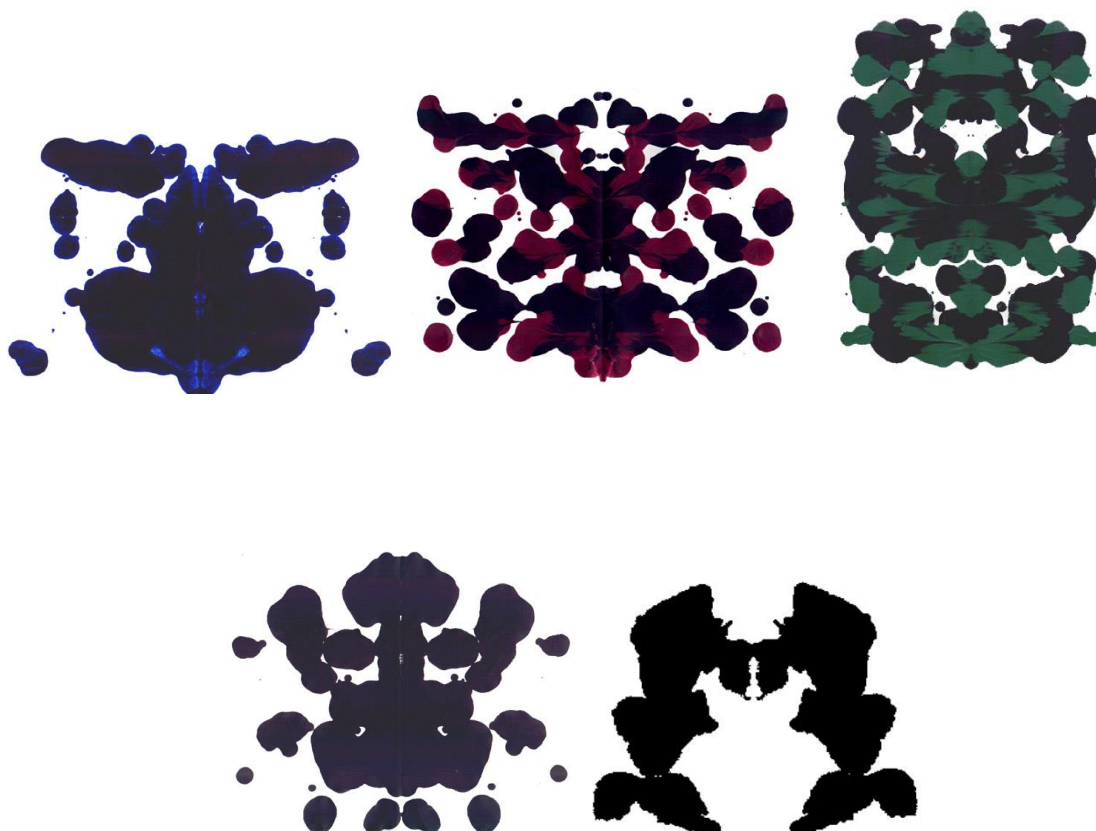
Date

Witness

Date

Appendix G

Inkblot Stimuli



Appendix H

Inkblot Stimuli Responses

It can be awkward to answer personal questions from a stranger. So, we're going to do an ice breaker activity to help warm-up for the interview today. I'm going to show you a series of cards, and I'd like you to tell me the first thing you see. It can be animal, an object, anything that comes to mind. There is no right or wrong answer...let's start with this one

YES:

Oh I see it too
I see how you see that
I agree, I see it
I see it as well

NO:

I don't quite see that...I see a...
Interesting...I see a...
Oh, I think I see...
I think I see a...instead.

- 1) Rabbit, Moose Face, Mask, Person sitting cross-legged
- 2) Cat Face, Dog Face, Person Meditating, Starbucks Lady
- 3) Tiger Face, Multiple Turtles, Dragon Face, Bugs
- 4) Cow Face, Sheep Face, Tree, Mushroom
- 5) Seahorses, Fish Kissing, Rams Butting Heads, Circus Master, Chess Piece

Appendix I

Interview Questions

Standardized introduction statement: *Thank you for agreeing to participate in this training exercise. I am going to ask you several general questions about your life experiences, both here at IUP and in your life outside of the university. In some instances, I may ask a specific follow-up question, but I am not looking for any right or wrong answer. Everything you say during the interview is confidential and will not be documented, with the exception of the limits to confidentiality discussed during the informed consent process. If you need a reminder about the limits of confidentiality, please let me know. Let's start with something simple...*

1. Tell me a little about where you're from
2. What is a typical day like for you?
3. How was high school for you?
4. How is your life at home different from your life at IUP?
5. Describe the best thing that has ever happened to you.
6. Tell me about an accomplishment you are proud of.
7. What is your number one goal in life?
8. What do you see as the greatest challenge to achieving your goal?
9. Tell me about a challenging situation you've faced
10. Tell me about a time you made a big mistake or felt like you really messed something up
11. Describe something you wish you were better at.
12. Tell me about a time you had a serious conflict with someone
13. Tell me about a time when you felt like you really let someone down
14. Tell me about the person who has had the most significant impact on your life.
15. How would you describe yourself to a stranger?
16. What are your most important values?
17. What's something most people don't know about you?
18. Tell me about your strengths.

Appendix J

Interview Guide

Thank you for agreeing to participate in this training exercise. I am going to ask you several general questions about your life experiences, both here at IUP and in your life outside of the university. In some instances, I may ask a specific follow-up question, but I am not looking for any right or wrong answer. Everything you say during the interview is confidential and will not be documented, with the exception of the limits to confidentiality discussed during the informed consent process. If you need a reminder about the limits of confidentiality, please let me know. Let's start with something simple...

1. Tell me a little about where you're from

- i. If unsure: Just say whatever comes to mind about your hometown
- b. It sounds like an interesting place. Let's try another

2. What is a typical day like for you?

- i. If Unsure: Tell me whatever seems relevant
- b. We're going to shift gears a bit

3. How was high school for you?

- i. If unsure: You can say anything that you think was important about your high school life
- b. Neutral: I'm hearing that you feel pretty neutral about high school
- c. Neg: I'm hearing that high school was difficult for you

4. How is your life at home different from your life at IUP?

- a. I see...We're going to shift gears a little bit now.

5. Describe the best thing that has ever happened to you.

- a. That sounds like an exciting time

6. Tell me about an accomplishment you are proud of.

- i. If topic is the same: It's okay if it's the same story
- b. That's quite an achievement! Let's see what's next

7. What is your number one goal in life?

- i. If unsure: It can be any type of goal personal, professional, academic..
- b. Interesting! This next one is related to your goal too...

8. What do you see as the greatest challenge to achieving your goal?

- i. If unsure: You can tell me anything that might make it difficult.
- b. That does sound difficult...we're going to go in a different direction now

9. Tell me about a challenging situation you've faced

- i. If Unsure: Any type of challenge you have dealt with
- b. It seems like that was really hard for you.

10. Tell me about a time you made a big mistake or felt like you really messed something up

- i. If the same: It can be the same event again
- ii. If unsure: You can talk about any time you made a mistake or felt like you messed up
- b. I'm hearing that it was a challenging time for you...this next one is a little different

11. Describe something you wish you were better at.

12. Tell me about a time you had a serious conflict with someone

- a. That sounds really difficult...this one is similar...

13. Tell me about a time when you felt like you really let someone down

- a. I'm hearing that it was really hard for you...
- b. Let's shift gears a little bit

14. Tell me about the person who has had the most significant impact on your life.

- a. This definitely seems like an important relationship.

15. How would you describe yourself to a stranger?

16. What are your most important values?

- i. Just tell me any of your personal beliefs that are important to you.
- b. Let's go on to the next one...

17. What's something most people don't know about you?

- a. Interesting! Okay last one...

18. Tell me about your strengths.

Appendix K

Demographic Questions

1. What is your age? _____ (Please note that you must be age 18 or older to participate. If you are not, please notify the interviewer).
2. What is your gender?
 - a. Male
 - b. Female
 - c. Transgendered
3. What is your race/ethnicity?
 - a. African American/Black
 - b. European American/White
 - c. Latina/Latino/Hispanic
 - d. Native American/Alaska Native
 - e. Asian/Pacific Islander
 - f. Biracial (please specify) _____
 - g. Other (please specify) _____
4. Have you ever been involved in psychotherapy?
 - a. Yes
 - b. No

Appendix L

Therapeutic Alliance Questionnaire

INSTRUCTIONS: The person who interviewed you is in training to become a therapist. The questions she asked you were very similar to the questions that might be asked during an intake interview, or initial meeting, with a therapist.

As you answer the following questions, think of the person who just interviewed you as “the therapist” the questions are asking you about. Imagine that the two of you just completed an intake interview, or initial meeting, and that she will be your therapist going forward.

When you get to the questions about goals, keep in mind that one of the first steps in therapy is to work with the therapist to identify your personal goals for the therapy process. Therapy goals may range from something very broad (ex: improving my mood) to something very specific (ex: improving my study habits for PYSC 101).

Circle the number that corresponds to how much you agree with each of the following statements.

	1	2	3	4	5	6	7
strongly disagree							strongly agree
1. I believe the therapist likes me.....1	2	3	4	5	6	7	
2. I felt disrespected by the therapist.....1	2	3	4	5	6	7	
3. I feel understood by the therapist.....1	2	3	4	5	6	7	
4. I believe I can trust the therapist.....1	2	3	4	5	6	7	
5. I believe we could work towards mutually agreed upon goals in therapy.....1	2	3	4	5	6	7	
6. I feel the therapist wants me to achieve my goals.....1	2	3	4	5	6	7	
7. The therapist does not understand the things that are important to me.....1	2	3	4	5	6	7	
8. I think the therapist would be able to help me achieve my goals.....1	2	3	4	5	6	7	
9. The therapist and I had a meaningful exchange.....1	2	3	4	5	6	7	
10. I found the therapist’s comments unhelpful.....1	2	3	4	5	6	7	
11. During the interview, I felt like I could be open and honest with the therapist.....1	2	3	4	5	6	7	

12. From this meeting today, I can imagine that
talking with a therapist about things that
challenge me would be helpful1 2 3 4 5 6 7

Appendix M

Measure of Liking

INSTRUCTIONS: Circle the number that corresponds to how much you agree with each of the statements on the following pages.

1-----2-----3-----4-----5-----6-----7
strongly disagree strongly agree

1. I felt close to the interviewer.....1 2 3 4 5 6 7
2. I can imagine myself continuing a professional
relationship with the interviewer.....1 2 3 4 5 6 7
3. I would feel comfortable working with the
interviewer on a collaborative project.....1 2 3 4 5 6 7
4. I would be willing to meet with the
interviewer again.....1 2 3 4 5 6 7
5. I liked the interviewer.....1 2 3 4 5 6 7

Appendix N

Perceptions of Therapy and Helping Behavior

INSTRUCTIONS: Circle the number that corresponds to how much you agree with each of the statements on the following pages.

1-----2-----3-----4-----5-----6-----7
strongly disagree strongly agree

1. Based on my interaction today with the interviewer,
I believe psychotherapy can be helpful.....1 2 3 4 5 6 7

2. Based on my interaction today with the interviewer,
I would be willing to refer a friend to therapy.....1 2 3 4 5 6 7

3. Based on my interaction today with the interviewer,
I would be willing to talk with a friend about
his or her emotional concerns.....1 2 3 4 5 6 7

4. Based on my interaction today with the interviewer,
I would be willing to appear in a mental health awareness
advertisement campaign.....1 2 3 4 5 6 7

Appendix O

Debriefing Form 2

Debriefing Form

Thank you for your participation in this study. We are interested in learning how shared subjective experience (I-sharing) impacts ratings of the therapeutic alliance following brief clinical encounters. We are also interested in learning whether I-sharing with an interviewer has an impact on individuals' ratings of Existential Isolation as compared to pre-interview baseline levels. This study also evaluated the impact of I-sharing on ratings of liking, perceptions of psychotherapy, and prosocial behavior related to mental health.

The term I-sharing comes from the distinction between the objective self (the "Me") and the subjective self (the "I"). The objective self (Me) includes everything we know about ourselves. We might include descriptions such as our background, family life, hobbies, values, memories, social identities, and so on when describing the objective self. In contrast, the subjective self (I) has no content. It refers to a person's current, in-the-moment experience of consciousness. I-sharing happens when we feel as though we are sharing an identical subjective experience with another person (Pinel et al., 2006). Research shows that I-sharing decreases feelings of Existential Isolation (Pinel, Bernecker, & Rampy, 2015). Pinel and her colleagues (2015) posit that the positive impacts of I-sharing in social relationships may also extend into the therapeutic relationship between patients and their providers in psychotherapy.

To study the aforementioned research questions, we randomly assign some participants to I-share with the interviewer and some participants not to I-share. This is achieved by leading the participants in the I-sharing group to believe that they see the same image in a series of inkblots as the interviewer. Those in the non I-sharing group are led to believe that they never saw the same image. We hypothesize that experiencing subjective similarity (I-sharing) will increase participants' ratings of the therapeutic alliance and the likability of the interviewer. Additionally, we hypothesize that participants who I-share with the interviewer will report a more positive overall perception of psychotherapy, as well as greater willingness to engage in prosocial behavior related to mental health. Finally, we hypothesize that I-sharing with the interviewer will decrease ratings of existential isolation as compared to baseline scores obtained through an online survey.

The videos recorded during the interviews will be used to ensure that the interviewer behaved in the same fashion towards volunteers in the I-sharing and the No I-sharing groups. The edited video, which includes only clips from several interviews of the interviewer asking questions, will be displayed to a group of students who will be asked to rate how similar the interviewer appears in the I-sharing vs No I-sharing composite videos. No video or audio recordings of the interviewees will appear in the videos.

If involvement in this study increased your interest in seeking psychotherapy services, the following resources are available in the Indiana, PA area:

IUP Counseling Center
IUP Center for Applied Psychology

724-357-2621
724-357-6228

Community Guidance Center
Armstrong/Indiana Crisis Hotline

724-465-5576
724-465-2605

If you would like to learn more about research on I-sharing and its potential application to psychotherapy, see the following articles:

Pinel, E. C., Bernecker, S. L., & Rampy, N. M. (2015). I-sharing on the couch: On the clinical implications of shared subjective experience. *Journal of Psychotherapy Integration*, 25(2), 59.

Pinel, E. C., Long, A. E., Landau, M. J., Alexander, K., & Pyszczynski, T. (2006). Seeing I to I: A pathway to interpersonal connectedness. *Journal of Personality and Social Psychology*, 90, 243-257.

Pinel, E. C., Long, A. E., Murdoch, E. Q., & Helm, P. (2017). A prisoner of one's own mind: Identifying and understanding existential isolation. *Personality and Individual Differences*, 105, 54-63.

Appendix P

Informed Consent Form 3

Video Review Informed Consent Form

You are invited to participate in this research study. This information is provided to help you make an informed decision about whether to take part in this study. You are asked to participate in the current study because you are enrolled in the General Psychology course at Indiana University of Pennsylvania. To participate in this research study, you must be at least 18 years of age. You will be given 1 credit toward your PSYC 101 research requirement, and the video review and follow-up questionnaire will take approximately 30 minutes to complete.

The current study will involve viewing two 5 minute video segments. After viewing the video segments, you will be asked to complete a questionnaire.

The research is being conducted by this researcher, who is a psychology graduate student attending Indiana University of Pennsylvania. The information obtained from the questionnaires will be used for my research and may be presented at professional and educational conferences and meetings and/or published in journals and/or books. The information gathered will be completely confidential. No one's data will be looked at it on its own; instead, everyone's data will be looked at together and examined for general themes.

Voluntariness and Confidentiality

All questionnaire data will remain anonymous. Your name will not be tied to any questionnaire responses.

Your participation in this study is **voluntary**. You are free to decide whether you wish to take part in the current study. If you decide to participate, you can change your mind later and exit the study at any time by informing the researcher that you wish to withdraw. If you decide to leave the study before completing the questionnaires, your informed consent form will be saved but no other identifying information will link you to the study. If you choose to participate, all the information and recorded answers on the questionnaires will be anonymous.

Risks/ Benefits and Compensation:

This research is of minimal risk to you. You will receive compensation in the form of 1 credit toward your PSYC 101 research requirement. Individuals who participate in the study may receive some personal benefits from their participation, as listening to the questions posed by the interviewer may lead them to think about their personal reactions to various life events. If considering the interview questions brings up feelings of distress, or increases your interest in psychotherapy, the following resources are available in the area:

IUP Counseling Center	724-357-2621
IUP Center for Applied Psychology	724-357-6228
Community Guidance Center	724-465-5576

This research is being completed by Julia von Heeringen under the direction of Dr. Anson Long. Please contact us if you have any questions about the study.

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724-357-4523

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724-357-7730).

If you agree to participate in this study, print and sign your full name below, along with today's date. Please understand that your responses are completely anonymous and that you have the right to withdraw from the study at any time. An unsigned copy of this informed consent form will also be available for you to keep.

Participant Name (Printed)

Participant Name (Signed)

Date

Witness

Date

Appendix Q

Video Comparison Questionnaires

(To be administered once after the first video and once after the second video)

INSTRUCTIONS: Thinking about the video you just watched, circle the number that corresponds to how much you agree with each of the following statements.

1-----2-----3-----4-----5-----6-----7
strongly disagree strongly agree

1. Based on the video, the interviewer
seemed friendly and nice.....1 2 3 4 5 6 7
2. The interviewer appeared to be interested
and engaged.....1 2 3 4 5 6 7
3. The interviewer's facial expression
suggested she understood
what the person was saying.....1 2 3 4 5 6 7
4. The interviewer's tone was warm
and genuine.....1 2 3 4 5 6 7
5. Based on the video, the interviewer
seems likeable.....1 2 3 4 5 6 7

Appendix R

Debriefing Form 3

Debriefing Form

Thank you for your participation in this study. Earlier in the year, we conducted a study in order to learn how engaging in a shared subjective experience (I-sharing) impacts ratings of the therapeutic alliance between an interviewer and the person she was interviewing. In order to study this, we randomly assigned some participants to I-share with the interviewer and some participants not to I-share. This was achieved by leading the participants in the I-sharing group to believe that they saw the same image in a series of inkblots as the interviewer. Those in the non I-sharing group were led to believe that they never saw the same image.

The videos you viewed today were compiled from clips of these interviews. You saw clips from both the I-sharing group and the non I-sharing group. In order to assess whether the interviewer behaved the same way with both groups, you were asked to rate how similar the interviewer appeared to be in both video segments.

If involvement in this study increased your interest in seeking psychotherapy services, the following resources are available in the Indiana, PA area:

IUP Counseling Center	724-357-2621
IUP Center for Applied Psychology	724-357-6228
Community Guidance Center	724-465-5576
Armstrong/Indiana Crisis Hotline	724-465-2605

If you would like to learn more about research on I-sharing and its potential application to psychotherapy, see the following articles:

Pinel, E. C., Bernecker, S. L., & Rampy, N. M. (2015). I-sharing on the couch: On the clinical implications of shared subjective experience. *Journal of Psychotherapy Integration*, 25(2), 59.

Pinel, E. C., Long, A. E., Landau, M. J., Alexander, K., & Pyszczynski, T. (2006). Seeing I to I: A pathway to interpersonal connectedness. *Journal of Personality and Social Psychology*, 90, 243-257.