ABSTRACT

Title of Document: PHYSICAL HEALTH IN PSYCHOTHERAPY: AN EXAMINATION OF DISCUSSION AND RESPONSE FROM THERAPIST AND CLIENT PERSPECTIVES

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This study investigated if and how physical health is discussed in open-ended psychotherapy in a naturalistic setting, including identifying frequency and content of reported physical health issues, in-session responses to these reports, decisions not to report a physical health issue, and relationships with other session variables. Participants were 54 clients and 11 doctoral therapists-in-training engaged in open-ended treatment at a low-fee, community psychotherapy clinic. Data about physical health was collected for each client at intake, and data on report of a physical health issue, characteristics of the report, therapists' response during the session, decision not to report, working alliance, real relationship, and session evaluation were collected after each session. Data were analyzed using descriptive statistics, mean comparison, and linear regression. Results indicate that while talking about a physical health issue was relatively infrequent, clients

had physical health issues that they found distressing. The most common physical health issues discussed were sleep, weight, and pain. Clients were more likely to share issues in session that they rate as more distressing and related to their mental health than those they chose not to share. Clients were three times more likely than therapists to initiate discussion about physical health in session, and issues that were discussed usually came up in the early phase of long-term, open-ended treatment, and were discussed in more than one session. In sessions when a physical health issue was discussed, depth of the discussion varied greatly, but when clients' understanding of their physical health issue was evolving or unclear, they more consistently talked about the issue in depth. When talking about physical health, therapists reported helping clients draw connections with their mental health through insight, while clients felt therapists focused more on exploration of the issue. Qualities of the discussion about physical health in session related to client-rated working alliance, real relationship, and session evaluation. Implications for training, research and practice are discussed.

PHYSICAL HEALTH IN PSYCHOTHERAPY: AN EXAMINATION OF DISCUSSION AND RESPONSE FROM THERAPIST AND CLIENT PERSPECTIVES

by

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Dedication

To my family, who has supported me along every winding trail of the journey to this point. And especially to my Mom and Dad, who taught me, respectively, that the soul needs the body and the body needs the soul.

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Chapter 1: Introduction

Philosophers, scientists and practitioners have debated the connection between mind and body since ancient times. Though today some view the mind and body as distinct entities (dualism) and some as one interrelated system (monism), the notion that the health of the mind and body are connected is well established. Many credit George Engel (1977) with the conceptualization of the interrelated system through his biopsychosocial model, which asserts that the course of illness is influenced by the interrelationships of biological, psychological, and social factors, though the framework was suggested first by Guze, Matarazzo, & Saslow in 1953. Guze and colleagues, (1953) had backgrounds in medicine and psychology and were the first to propose that a comprehensive approach to disease requires examination of four factors: environment or life situation, heredity and past experiences, biological changes, and behavioral responses. With specific implications for psychotherapy, the authors suggested that "…[behavioral responses to disease] are largely determined by factors in the individual's heredity and past experience and hence reflect to a considerable degree the individual's social and cultural setting. Furthermore, these subsequent responses are the ways at the disposal of the organism for dealing with its disturbed equilibrium" (p. 129, Guze, Matarazzo, & Saslow, 1953).

At present, the biopsychosocial theory influences psychological practice and policy. Health psychology continues to grow as an area of specialization for psychologists; established in 1978, the Health Psychology division of the American Psychological Association (APA Division 38) ranks in the top 10 in membership among the APA's 54 divisions (Masters et al., 2009). Health psychology has evolved into an

area of specialization focused on the application of the connections of behavioral, emotional, cognitive, social and biological factors to prevention and treatment of illness and disease (APA, 2011). Psychology as a whole has embraced a multifaceted definition of health. Today in its education and training guidelines, APA calls for students who are prepared to be health service providers across work settings, saying that there is an increased need to focus on "biological, psychological, social, and cultural aspects of health and behavior regardless of whether one proceeds to practice with traditional mental health populations or in other areas of health" (p. 412, Health Service Psychology Education Collaborative, 2013). Further, the education and training of psychologists "must evolve from a primarily psychosocial focus to a biopsychosocial focus in terms of the substantive knowledge base if psychologists are to provide appropriate health care services, including assessment, screening, psychotherapy, counseling, diagnosis, treatment, prevention, remediation, consultation, and supervision" (p.7, Belar, 2014). In changes to accreditation standards, the APA's Commission on Accreditation adopted new guidelines in February, 2015 that change the standard in psychological education from "professional psychology" to "health service psychology" (APA, 2015). These new guidelines were effective January 1, 2017 and defined health service psychology as:

> "…the integration of psychological science and practice in order to facilitate human development and functioning… [including] the generation and provision of knowledge and practices that encompass a wide range of professional activities relevant to health promotion, prevention, consultation, assessment, and treatment for psychological and other health-related disorders. Programs that are accredited to provide training in health service psychology prepare individuals to work in diverse settings with diverse populations. Individuals who engage in health service psychology have been appropriately trained to be eligible for licensure as doctoral level psychologists." (p.3, APA, 2015)

Counseling psychology's founding principles have long been in line with a holistic view of care and of the person. Dedicated to wellness and prevention, counseling psychology employs a holistic, developmental, and strengths-based approach to well-being (Chwalisz & Obasi, 2008). More recently, counseling psychologists are recognizing the role of disease prevention, and health promotion in overall well-being. Nearly 70% of APA-accredited doctoral programs in counseling psychology list health psychology as a faculty research interest on their websites and more than 10 percent offer health psychology coursework or practicum (Nicholas & Stern, 2011). After graduation, students from these programs increasingly practice in areas that require attention to physical well-being including integrated health care and campus wellness centers (CCPTP, 2005). When naming professionals best suited to provide psychological services to disabled veterans returning from World War II with both physical and psychological concerns, the Veterans Administration identified counseling psychologists (Whiteley, 1984). In 2005, the numbers of counseling psychology graduates employed in Veterans Administration medical centers had nearly tripled from the decade earlier to 14%, and individuals working in general hospitals had nearly doubled to 9% (CCPTP, 2005).

Research has begun to take a closer look at the way counseling psychology programs integrate health psychology as part of training (e.g., Raque-Bogdan et al., 2012), and competencies continue to develop as benchmarks for such education (e.g., Fouad et al., 2009). New, competency-based requirements for doctoral programs in psychology require a focus on health psychology and will be implemented in accreditation site visits beginning in 2017 (APA, 2015). Still, it remains unclear if there

is a relationship between this knowledge and training and how doctoral trainees care for clients during the therapy hour.

Additionally, psychologists have not yet come to consensus on key issues related to the mind body relationship. First, the psychological literature is not consistent in its perspective of the mind-body relationship. At times the relationship is depicted as the connection between two separate entities, or dualism, and at the other extreme is depicted as a single, holistic system, or monism (Leitan & Murray, 2014). Second, some have argued that there are ethical boundaries in psychology's embrace of biological factors. For example, Altmaier (1991) points out that psychologists must be aware of issues of competency as they are not educated and trained in all areas of healthcare. However, the APA is clear that the call for a basic familiarity with disciplines of anatomy, physiology, genetics, pharmacology, anthropology, sociology, and economics does not aim "…to train mini physicians." (p. 423, Health Service Psychology Education Collaborative, 2013) Instead, psychologists should "appropriately assess and treat problems in their areas of expertise as well as ensure whole person care in collaboration with other health professions, including when to refer" (p. 423, Health Service Psychology Education Collaborative, 2013).

People come to psychotherapy seeking help for a wide range of challenges in their lives. Among the problems most commonly presented at the beginning of therapy are relational strain, anxiety, and depression (Benton et al., 2003). While these problems are widely viewed as psychological, research increasingly demonstrates that these concerns are related to the well-being of both mind and body. For example, in a study of 500 primary care clients with physical complaints, researchers concluded that 29% of visits

were due to psychological concerns rather than medical ones (Kroenke, Jackson, & Chamberlin, 1997).

A closer look at the most common presenting problems in psychotherapy illustrates the significance of the mind-body relationship. Research examining the impact of relational discord indicates that those battling interpersonal issues may also experience a decline in physical functioning. For example the quality of a marriage has been demonstrated to be related to physical health, through indirect pathways such as associated depression's impact on health habits and direct pathways such as a decline in cardiovascular, immune, and other physiological mechanisms (Kiecolt-Glaser & Newton, 2001). Anxiety and depression are among the most commonly occurring psychological challenges among those with physical health issues. Distressing physical, or somatic, symptoms are three times more likely for those with depression and anxiety (Kroenke, 2003; Sha et al., 2005). Anxiety has been linked to countless physical concerns, as feelings of intense fear and distress can be accompanied by physiological symptoms that ultimately affect normal physical functioning (e.g., Baxter et al., 2014). Bair and colleagues (2003) concluded after a review of medical literature that of those with depression, 65% also reported physical pain. Medical research has further indicated that psychological factors influence medical conditions as much as the underlying medical disorder (Katon, Lin, & Kroenke, 2007; Kroenke, Sharpe, & Sykes, 2007).

As evidence mounts suggesting that well-being is related to both mind and body, research also suggests that psychotherapy can produce positive effects for physical as well as psychological health (Andersen, 1992). This evidence includes reductions in physical symptoms (e.g., Abbass, Kisely, & Kroenke, 2009) as well as decreased

utilization of medical services (e.g., Mumford, Schlesinger, & Glass, 1981) associated with psychotherapy. Interventions such as relaxation and mindfulness that target bodily awareness and emotional regulation are being used more frequently by psychologists (Baer, 2003; Brown, Marquis, & Guiffrida, 2013; Grossman et al., 2014). However, it was unclear if the intention of such practices among psychologists is to target physical well-being as well as psychological well-being. Further, while behavior change sought in psychotherapy often involves physical concerns, such as exercise and eating, it remained unclear the degree to which the typical person entering psychotherapy perceives this as a venue for exploring and addressing concerns related to their physical well-being or physical causes, correlates or consequences of psychological or emotional distress. Overall, there was a need to explore the attitudes of clients in psychotherapy to explore whether people seek psychotherapy to help with adjustment to a physical concern and whether they disclose concerns of physical well-being in therapy. This study was a first step to answering these questions, and specifically aims to examine disclosure of physical concerns in therapy from both client and therapist perspectives.

While this study aimed to begin exploration of client and therapist attitudes and behaviors related to physical well-being in psychotherapy, medical literature has explored client attitudes and behavior (e.g., disclosure), including attitudes about and disclosure of psychological concerns. Investigations of health attitudes and beliefs among clients has suggested that individuals with psychological and physical problems vary in their attribution of these problems (Frostholm, Ornbol, & Fink, 2015). Among primary care clients with a physical disease, such as heart disease, a vast majority (86%) perceived that their condition was purely physical, while 12% viewed the problem was both physical

and psychological. Conversely, among clients presenting with a psychological problem such as depression or anxiety, about a quarter felt the problem was purely physical, while 73% felt the problem was both physical and psychological. Whether the root of the problem is physical or psychological, research has demonstrated that health concerns are not always expressed and that medical personnel may not explore psychosocial sequalae (Puts et al., 2012).

To be sure, the experience of illness and disease falls on a continuum of psychological impact. Still, physical concerns and effects from medical treatment of those concerns often leads to a clear and inevitable need for psychological adjustment. Though it can be difficult to determine the extent to which individuals attribute a symptom such as pain or chronic fatigue to a psychological or physical concern, it is important to consider the type of treatment individuals seek to treat these symptoms. National statistics indicate that more individuals with depression seek medical treatment on a regular basis than they do psychological treatment (Wang et al., 2005). This may be because medical providers can prescribe medication to treat the symptoms expressed by the client. Still, this treatment does not address the psychosocial contributors or consequences of the underlying condition.

Because more and more people are living with chronic health conditions, but these individuals may not view psychological treatment as a place to bring these concerns, it is important to consider how frequently clients who have a health condition that disrupts their functioning and quality of life report this in therapy. Several factors from the medical literature may be relevant to disclosure of physical health issues in psychotherapy.

Medical literature points to evidence that clients frequently fail to disclose or conceal health concerns when communicating with physicians (e.g., Maguire, 1985) and further describes that psychological concerns are among those concealed in medical settings (Heaven & Maguire, 1996). Reviews of medical literature suggest that the way clients feel about their healthcare provider's interest in their concern has an effect on their disclosure of this concern. For example, clients may perceive their healthcare provider as too busy to be burdened with concerns that are not of utmost importance or that the healthcare provider is not able to help with the problem (Ryan et al., 2005). When clients perceive that it is the provider's job to talk about all aspects of quality of life, they have greater willingness to discuss psychological issues with doctors (Street et al., 1995). Taken together, this evidence raises questions about similar phenomena in psychotherapy, such that it is important to examine whether physical concerns are among those disclosed or concealed in psychotherapy settings and whether they perceive that that therapy is a place to discuss these concerns.

Psychological literature has not yet directly explored the frequency or characteristics of disclosure about physical health issues in psychotherapy. However, limited research suggests that body-related issues are among the least disclosed (Farber and Hall, 2002). Even among those with overt physical concerns, such as veterans returning from war, physical concerns are not readily presented as important in psychological adjustment despite reported symptoms that have direct health consequences (e.g., sleep; Rosen, Adler, & Tiet, 2013). Further, disclosure of physical concerns may differ depending on affective and personality factors of clients. While we have established that negative affective states, such as anxiety and depression are linked

with negative indicators of physical health (Krantz & Glass, 1984), research has also shown that individuals with higher levels of negative affect report more physiological symptoms than those with lower levels of negative affect (Jorgensen & Richards, 1989). Costa and McCrae (1987) found a similar pattern of symptom reporting among those with higher levels of neuroticism.

Still, patterns of physical health disclosure are often studied in medical or classroom settings, and no study to date could be found that examined voluntary disclosure of health issues in therapy. Therefore, examination of two factors related to disclosure in general psychological literature may be helpful to understand influences of client disclosure of physical concerns: distress and desire for intimacy. First, research indicates that there is a relationship between client levels of distress and disclosure in psychotherapy. Stiles theorized a "fever model" of self-disclosure, likening distress and disclosure to a physical infection and a fever as both disclosure and a fever are part of a return to normal functioning (Stiles, 1987). In a test of his theory, researchers concluded that those with higher trait anxiety used more disclosure when presenting an event about which they were anxious or distressed compared with an event about which they were happy (Stiles, Shuster, & Harrigan, 1992). These results suggest that higher levels of psychological distress about an issue leads to higher rates of disclosure of that issue, an assertion that has been supported in other empirical studies (e.g., McDaniel, Stiles, & McGaughey, 1981) and theories of disclosure.

The notion that distress is related to disclosure is also supported in the theory of disclosure decision-making. In a proposed disclosure decision-making model, Omarzu (2000) suggested that the goal of the disclosure must be a need or goals such as approval,

intimacy, relief, identity, or control. It may be that in the case of disclosure of concerns regarding physical well-being, individuals who need more relief are more likely consider disclosure.

As noted by Omarzu (2000) in the model of disclosure decision-making, intimacy is a second important factor to consider related to revelations about physical health in psychotherapy. Those who desire intimacy, or a deep, shared understanding of their personal experience are also more likely to consider disclosure. Engagement in psychotherapy requires a social exchange between the therapist and client. Worthy, Gary and Kahn (1969) asserted that disclosure is an element of social exchange and that intimacy increases the value of such an exchange. Further, disclosure was associated with liking the other person, such that more disclosures were made with those who were better liked, and that individuals who made more intimate disclosures were liked more. While positive relational factors influence disclosures, on the other hand, those who desire intimacy with another may also consider interpersonal risk related to disclosure (Cline, 1989), experiencing tension between revealing and withholding information (Baxter & Montgomery, 1996) and boundaries of privacy (Petronio & Martin, 1986). These elements have a bearing on the elements included in this study, as one of the aims is to understand how disclosure is related to elements of the therapy relationship.

To summarize, while health psychology has grown from within the broader field of psychology into a specialization, policy makers such as the Council on Accreditation of the American Psychological Association and practitioners are embracing the notion that health is related to psychological and social concerns. This growing acceptance of the integration between physical and mental health care stems largely from mounting

research that supports a relationship between development and functioning of mind and body. Still, it was unclear if and how psychologists, with access to this theory and evidence perceive and respond to physical concerns and their interplay with psychosocial well-being in their practice. Moreover, it was unclear whether those who seek psychotherapy view psychotherapy as a place to raise physical concerns and psychologists as interested in and equipped to help them address physical concerns and report these concerns.

The purpose of this study was to investigate and understand whether and how psychotherapists and clients perceive and discuss physical health in psychotherapy in a naturalistic setting. Specifically, this study sought to understand patterns of and attitudes about physical health disclosure among clients, attitudes about and patterns of inquiry among therapists, and ultimately, to describe how the behaviors of report of a physical health issue and discussion affect the process and outcome of psychotherapy.

The Present Study

The purpose of the present study was to investigate and describe therapist and client attitudes about concerns of physical well-being in psychotherapy, client report of these concerns, and how variables of therapy process and outcome differ depending on attitudes about and reports of a physical health issue. Specifically, the study had three aims: 1) To understand these attitudes and report patterns among clients; 2) to understand these attitudes and responses to reports by therapists; and 3) to explore the ways in which these attitudes and behaviors about reports of physical health issues affect therapy process variables and therapy outcome.

The first aim of this study is to understand the nature of any physical health issues clients report prior to their therapy experience in order to assess whether those issues are discussed in therapy. The primary aim of this study was to examine attitudes and behaviors about talking about physical health in therapy and whether such disclosures occur. As no study to date had examined these questions, the purpose of this study was to examine whether a discussion of physical concerns occurs in therapy and how therapists responded to clients in those instances. Further, this study aimed to capture beliefs of clients about the relation of their physical well-being to their mental well-being, how distress related to disclosure of health concerns in therapy, the therapist's interest and clients' perception of therapist interest in their physical well-being, and the affect of discussing a physical health issue on the therapy relationship.

Research Question 1: What is the physical health status of psychotherapy clients at intake?

RQ1a: How many physical health issues do clients report at intake?

RQ1b: How do clients rate the severity of physical health issues reported at intake?

RQ1c: What physical health issues do clients report at intake?

Research Question 2: What is the client perspective of talking about physical health in psychotherapy?

RQ2a: How often do clients report that they discuss a health issue in session?

RQ2b What physical health issues do clients report that they talk about with therapists in session?

RQ2c: When they talk about a physical health issue, what are client attitudes about the relationship between physical and mental health?

RQ2d: How much distress do clients report about the physical health issue they talk about?

RQ2e: In how much depth is the physical health issue talked about in session?

RQ2f: How positively do clients feel about having talked about the physical health issue?

RQ2g: Do clients report that physical health issues come up repeatedly or are they "one-off" conversations?

RQ2h: Who do clients report initiates talking about the physical health issue?

As previously mentioned, therapists may have used interventions targeting the body, such as mindfulness or relaxation and even taken a client history about medical conditions. Still, no study to date has examined if and how psychotherapists discuss physical well-being with their clients. Therefore, the second aim of this study was to understand therapist attitudes about and patterns of inquiry related to client physical health.

Research Question 3: What is the therapist perspective of talking about physical health in psychotherapy?

RQ3a: How often do therapists report that they discuss a health issue with clients in session?

RQ3b: What physical health issues do therapists talk about with their clients?

RQ3c: In how much depth is the physical health issue talked about in session?

RQ3d: When they talk about a physical health issue, what are therapist attitudes about the relationship between clients' physical and mental health?

RQ3e: Do therapists report talking to clients about how the physical health issue relates to psychological concerns?

As physical health issues often trigger the need for psychological adaptation, this study aimed to explore the degree to which talking about physical health issues affected the way clients and therapists view the therapeutic work. While measures in this study were included to capture changes in the real relationship and working alliance, open-ended questions were also included to be able to understand how therapists responded to disclosures of physical health issues without the influence of a priori suggestions about what those responses might be.

Research Question 4: How do therapists respond to the patient's discussion about the health issue?

RQ4a: How do therapists report they respond when talking about a physical health issue(s)?

RQ4b: What do clients report about how their therapist responded to when talking about a physical health issue(s)?

The act of disclosing any concern was thought of as a precursor for receiving support related to that concern. As the psychotherapy included in this study could have involved disclosure of any issue, and disclosure involves relief, intimacy, and risk, it raises questions about what affects, if any, disclosure of physical well-being would have on psychotherapy process and outcome. The final aim of this study was to explore the relationship between physical health disclosure and process and outcome variables. Specifically, this study sought to explore the degree to which physical health disclosure relates to quality of the working alliance, real relationship, session evaluation, and therapeutic progress.

Research Question 5: How does talking about a physical health issue in session affect post-session scores of the Real Relationship**?**

RQ5a: Do scores of therapist-rated real relationship differ by factors associated with talking about physical health during the session?

RQ5b: Do scores of client-rated real relationship differ by factors associated with talking about physical health during the session?

Research Question 6: How does talking about a physical health issue in session affect post-session scores of the Working Alliance**?**

RQ6a: Do scores of therapist-rated working alliance differ by factors associated with talking about physical health during the session?

RQ6b: Do scores of client-rated working alliance differ by factors associated with talking about physical health during the session?

Research Question 7: How does talking about a physical health issue in session affect post-session scores of Session Evaluation**?**

RQ7a: Do scores of therapist-rated session evaluation differ by factors associated with talking about physical health during the session?

RQ7b: Do scores of client-rated session evaluation differ by factors associated with talking about physical health during the session?

Finally, while it was important to examine times when therapists and clients talked about physical health issues in psychotherapy, it was also important to examine times when clients had a physical health issue but chose not to talk about it from both therapist and client perspectives.

Research Question 8a: How often do clients have a physical health issue that they chose not to talk about in therapy?

RQ8b: How much distress do clients report about the health issues they do not talk about in therapy?

RQ8c: When patients choose not to talk about a health issue, what are patient attitudes about the relationship between physical and mental health?

RQ8d: What are the reasons clients describe for not talking about health issues in therapy?

RQ8e: Do therapists suspect patients have a health issue they are not talking about?

RQ8f: When therapists sense clients have a health issue they are not talking about, what gives them that sense?

Chapter 2: Method

Dataset

The study utilized post-session survey data collected at the Maryland Psychotherapy Clinic and Research Lab beginning in May 2016 and ending in May 2017.

Participants

Therapists. Therapists were 11 doctoral student trainees in Counseling Psychology (*3 male, 8 female; 9 White, 2 Asian or Asian American/International*), under the supervision of licensed psychologists at the same clinic. Their ages ranged from 25 to 67 (M = 31, SD = 12.06). Each therapist had been a student in the Counseling Psychology doctoral program for two or more years, had completed one pre-practicum, and at least two general practica prior to working at the clinic. Each therapist saw 2 to 10 clients included in this data set.

Clients. The study included 54 client participants (24 male, 30 female; 24 white, 14 Black, 8 Latino/a, 3 Asian, 3 multiethnic, 1 Indonesian American, and 1 Jewish American). Ages ranged from 18 to 69 (M = 34, SD = 12.72). In terms of education level, 6 had a high school diploma, 4 had some college, 5 had an associate's degree, 22 had a bachelor's degree, 2 had some graduate school, 9 had a master's degree, and 3 had doctoral degrees (data for this question was missing for 3 clients).

Judges. Three judges rated qualitative data included in this study, including two doctoral students who were also former therapists at the same clinic (2 female, 2 white), and one licensed, tenured faculty member (female, white).

Measures

Overview. This study employed 5 psychological measures, which are described in more detail below. Only the clients completed one of the measures: self-report health status given at intake (*See Table 1 for timeline of measures*). Both clients and therapists completed the remaining four measures (The Working Alliance Inventory-Short Revised, Real Relationship Short Form, Session Evaluation Scale, and Physical Health in Psychotherapy Measure). Selected measures were chosen to inform the study's questions about the occurrence and characteristics of disclosure of physical health in psychotherapy. The Self-Report Health Status is a one-item question that served as a check on client disclosure or concealment of health concerns. The Physical Health in Psychotherapy Measure, which was designed for this study, assessed the degree to which clients reported health concerns and associated feelings about such discussions. The Session Evaluation Scale was included to be able to detect effects specific to individual therapy sessions, which may or may not have included disclosure of health concerns. The Working Alliance and Real Relationship measures were included to capture effects of disclosure of physical health issues on these therapy process variables, as physical health issues and goals may have also related to psychological concerns and goals and interpersonal disclosure is an aspect of interpersonal relationships (e.g., intimacy). More about the rationale for these variables can be found in the Review of the Literature (Appendix A).

The **Working Alliance Inventory-Short Revised** (WAI-SR; Hatcher & Gillaspy, 2006) is a 12-item measure designed to assess the quality of the therapeutic working alliance using the three components of the tripartite model of the alliance (Bordin, 1979;

1994) as subscales: bond, tasks, and goals. The measure was adapted from the original 36-item measure (Horvath & Greenberg, 1989) and uses a 5-point scale ranging from 1 (seldom) to 5 (always). The bond subscale measures the perception of a positive attachment between the client and the therapist (e.g., "I believe my therapist likes me"; See Appendix I). The tasks subscale measures the perception of tasks of the therapy as relevant and effective (e.g., "As a result of these sessions I am clearer as to how I might be able to change"). The goals subscale measures the extent to which therapist and client value and agree upon goals of the therapy (e.g., "My therapist and I collaborate on setting goals for my therapy"). For the purposes of this study, the total score was used to represent the overall strength of the working alliance with higher scores indicating higher levels of alliance. The measure had demonstrated adequate reliability with Cronbach's alpha reported to be .90 (Hatcher & Gillaspy, 2006). The WAI-SR has also correlated with other measures of the alliance, such as the California Psychotherapy Alliance Scale ($r = .74$) (CALPAS; Marmar, Horowitz, Weiss, & Marziali, 1986) and the Penn Helping Alliance Questionnaire ($r = .80$) (HAQ; Alexander & Luborsky, 1986). Further, the measure had demonstrated correlation with measures of treatment outcome, such as client and therapist ratings of improvement (Hatcher & Gillaspy, 2006). In their initial investigation of the developed short version of the WAI, Hatcher and Gillaspy collected data from 231 adult clients and their therapists at a university clinic, much like the one in the current proposal, and another sample of 235 outpatient, adult clients. Internal consistency for the total score in that study was .91 for sample 1 and .92 for sample 2. In this study, internal consistency for the client sample was .95 and was .95 for the therapist sample.

The **Session Evaluation Scale** (SES; Hill & Kellems, 2002) is a measure of client and therapist perception of the quality of the session. The original 4-item scale included the items “am glad I attended this session,” “did not feel satisfied with what I got out of this session,” “thought the session was helpful,” and “did not think the session was valuable.” It was expanded to 5 items by adding the item “rate the overall effectiveness of this session” to increase score variability (Lent et al., 2006). The items were rated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) (See Appendix H), and sum to create a total score. After reverse scoring two of the items, a total score was obtained by summing and then averaging the responses, and higher scores reflect higher perceptions of session quality. The therapist-rated version of the scale had demonstrated adequate reliability (Cronbach’s alpha = .90; Hill et al., 2015). The client-rated version of the scale had also demonstrated adequate reliability (Cronbach’s alpha = .93; Hill et al., 2015) and had been positively correlated with client ratings of session understanding (r = .41), depth (r = .51), working alliance (r = .81), and the therapy relationship (r = .62) (Hill et al., 2015; Hill & Kellems, 2002). In this study internal consistency for the client sample was .90 and was .92 for the therapist sample.

The **Real Relationship Inventory- Therapist** and **Real Relationship Inventory-Client** (RRI-T and RRI-C; Gelso et al., 2005; Kelley, Gelso, Fuertes, Marmarosh, & Lanier, 2010) 12-item short forms were developed for Hill and colleagues (2014), and the total scores was used in the present study to assess perceptions of realism and genuineness in the therapeutic relationship. Example items included “I was open and honest with my therapist” and “My therapist did not see me as I really am” (See Appendix G). The short forms demonstrated high correlations with the original measure

(*r=.91* and *r=.96;* Hill et al., 2014). Each item was rated on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). Both forms had demonstrated correlations with other process and outcome variables (e.g., Fuertes et al., 2007; Lo Coco, Gullo, Prestano, & Gelso, 2011). In this study, internal consistency for the client sample was .87 and was .92 for the therapist sample.

Self-Report Health Status. This open-ended question was developed for and included in this study as qualitative description of health conditions experienced by clinic clients. The question asks, "Please list any physical health issue(s) that you currently have that effects your quality of life. This concern(s) could be something for which you have a formal diagnosis or something that is ongoing. Concerns can range from those that are mild to severe. Examples include ongoing headaches, diabetes, weight, injury, chronic pain, cancer and more. " (See Appendix J).

The Physical Health in Psychotherapy Measure was a short measure (9-13 items for clients and 9-11 items for therapists) designed for this study to assess client report of physical health in the most recent therapy session (See Appendix F). This measure was modeled on a secret disclosure measure (Marks, 2017) for the same clinic. Participants were instructed that "In therapy sometimes people talk about their physical health. For example, you may have constant headaches, struggles with your weight, be battling a chronic illness or disease, or other physical health condition. Sometimes these things come up in therapy and sometimes they don't. When answering the following questions, a physical health issue refers to any physical concern you have, from mild to severe." Because this measure consisted of single items to assess different factors of physical health in psychotherapy, no calculations were done to determine scale reliability.

Client Form. Participants were reminded that therapists do not see any of their responses to post-session measures and then asked: "Did you talk about a physical health with your therapist in this session?" If they responded yes to the initial question, they were then asked a series of questions, including: Who initiated talking about the physical health issue? (I did/my therapist did); Is this the first time you have talked about this issue with your therapist? (yes/no); In a few words, please describe the physical health issue(s) you talked about. (e.g., illness, sleep, diet, physical symptom); How distressed were you by the physical health issue, prior to sharing? (0 Not at all – 4 Extremely Distressed); How much do you believe that the physical health issue relates to your mental health? (0 Not at all – 4 Extremely Related); How do you feel about having talked about the physical health issue? (0 Not at all – 4 Extremely Positively); We talked about the physical health issue in depth (1 Strongly Disagree – 5 Strongly Agree); and How did your therapist respond to you talking about a physical health issue? (open-ended). If they responded no to the initial question, they were asked: Do you have a physical health issue that you chose **not** to talk about with your therapist? Please note that you will not be asked to disclose this issue if you select "yes." If they answered yes to that question, they responded to the following questions: Please describe why you chose not to talk about this physical health issue (open-ended); How distressing do you find the physical health issue that you did not disclose? (0 Not at all – 4 Extremely Distressing); and How much do you believe that the physical health issue relates to your mental health? (0 Not at all – 4 Extremely Related).

Therapist Form. Participants were given the same instructions as clients and then asked: "Did the client you just saw talk with you about a physical health issue in this

session?" If they responded yes to the initial question, they were then asked a series of questions, including: Who initiated talking about the physical health issue? (I did/my client did); Is this the first time you have talked about this issue with your client? (yes/no); In a few words, please describe the physical health issue(s) your client talked about. (e.g., illness, sleep, diet, physical symptom); How much do you feel that the physical health issue relates to your client's mental health? (0 Not at all – 4 Extremely Related); We talked about the physical health issue in depth (1 Strongly Disagree – 5 Strongly Agree); We talked about how the physical health issue(s) relates to the client's psychological concern(s) (yes/no); and How did your therapist respond to you talking about a physical health issue? (open-ended). The therapist version of this measure asked 2 questions that followed a "no" response to the initial question "Did you get the sense that your client chose not to disclose a physical health issue in this session?" (yes/no) and "What gave you that sense?" (open-ended).

Procedure

Table 1. Timeline of Study Measurement

Intake	**After Every Session**
1. Self-Report Health Status (P) 2. WAI-SR (T/P) 3. RR-S (T/P) 4. SES (T/P) 5. Physical Health in Psychotherapy (T/P)	1. WAI-SR (T/P) 2. RR-S (T/P) 3. SES (T/P) 4. Physical Health in Psychotherapy (T/P)

P—signifies measure is completed by client T—signifies measure is completed by therapist

Treatment. Prior to intake, clients completed a demographic questionnaire (see Appendix X). Sessions were typically conducted weekly for 50 minutes. After each session, clients and therapists completed the therapist or client versions of the WAI-SR,

SES, RRI, and the Physical Health in Psychotherapy Measure. (See Table 1 for a timeline of measures).

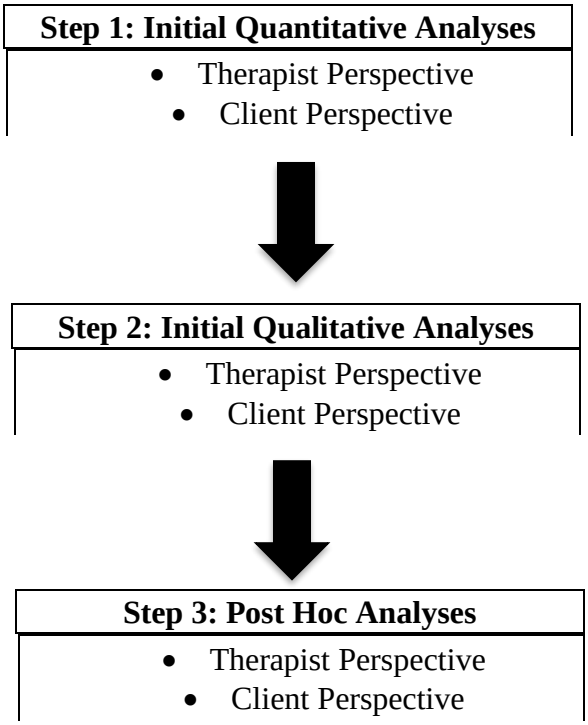
Therapist recruitment and training. Therapists eligible for this study were those selected for an externship opportunity at the university-based clinic. Announcements about the externship opportunity were made via email and within the counseling program that houses the clinic. Therapists selected for the externship positions were done so at the discretion of the clinic's training directors. Externs attended a 2-day orientation with the clinic directors at the beginning of each year of externship experience. At the time of this orientation, they also completed a demographic questionnaire that includes info such as age and number of years of counseling experience (See appendix E). Each therapist held a caseload of up to 6 clients and participated in weekly individual supervision with a licensed psychologist and bi-weekly group supervision with peers and a licensed psychologist.

Client recruitment. Clients were recruited through clinic advertisements on Internet websites, and by local therapists, physicians, agencies, and word of mouth. Potential clients were screened over the phone to determine eligibility for clinic services (over the age of 18, not psychotic or suicidal, not currently in individual therapy or seeking marriage or family therapy, stable for at least two months on any psychiatric medications, able to pay a fee of $25 to $50 per session, willing to have sessions videotaped and to participate in research, and interested in an insight-oriented, long-term approach to treatment). Clients and therapists were matched according to availability and client-therapist match as agreed upon by therapists and a clinic co-director. Therapists

and clients engaged in open-ended treatment, the length of which was determined by the course of treatment and the therapist's tenure at the clinic.

Chapter 3: Data Analysis

Figure 1. Data Analysis Plan



Initial Analysis

Frequencies were computed to analyze self-reported client health concerns at intake. Means, standard deviations, and correlations were computed for number and severity of health issues at intake and all post-session client and therapist responses, including the occurrence of discussion about physical health in session, who initiated talking about physical health, whether it was the first time the health issue was discussed, attitude about relationship between physical and mental health, distress level, how positively clients felt after talking about physical health, depth of discussion about the physical health issue, and whether therapists reported talking to clients about the relationship between physical and mental health.

To examine mean differences of dichotomous variables, independent samples t-tests were planned to compare scores of client-rated scores of Working Alliance, Real Relationship, and Session Evaluation based on client responses to dichotomous items from the Physical Health in Psychotherapy Measure. Grouping variables for each t-test included whether each session contained a report vs. no report of a physical health issue, who in the session initiated talking about the PHI, and whether the session was the first time talking about the physical health issue. An independent samples t-test was planned to examine whether scores of Working Alliance, Real Relationship, and Session Evaluation differed by clients' decision to not talk about a physical health issue during a session – a dichotomous variable.

Similar t-tests were also planned for responses from the therapist perspective and included comparison of means for dichotomous items from the Physical Health in Psychotherapy Measure as grouping variables and the outcome measures of therapist-

rated WAI-SR, RRI, and SES. Specifically, these grouping variables included report vs. no report of a physical health issue (PHI), who initiated talking about the PHI, whether it was the first time talking about the physical health issue, and whether they talked about how the PHI relates to the client's mental health.

Qualitative data related to the content of the health disclosures, how therapists responded to the disclosure, client perception of therapist response to the disclosure, and therapist sense of client choice not to talk about the physical health issue will be reported and analyzed using modified consensual qualitative research (CQR-M). For instances when clients report they chose not to talk about a physical health issue, I reported means, standard deviations, and correlations related to the frequency of concealment and levels of distress and perception of relationship between physical and mental health.

Relationships between Report of Physical Health Issues and Client- and Therapist-Rated Post-Session Measures

As this study aimed to address the presence of a relationship between factors related to talking about physical health in session and process and outcome measures, linear regression was used to examine the predictive value of client and therapist-rated WAI-SR, client and therapist-rated SES, and client and therapist-rated RRI. The single-item questions of the client and therapist versions of the PHP measure was used as predictors in the regressions. The dichotomous items from these measures were dummy coded and included: whether a physical health issue was discussed in session, whether a client had a physical health issue they chose not to talk about, who initiated talking about the physical health issue, whether the therapist talked to the client about the relationship between physical and mental health, and whether it was the first time the physical health

issue was talked about in session. The remaining variables were considered continuous and included: distress level, relationship between physical and mental health, depth of discussion, and feeling about the discussion of the physical health issue.

Because there were a number of possible predictors and these regressions are of exploratory nature, this study selected predictors for each simultaneous regression based on theoretical and correlational data from this study. Therefore, final predictors selected for each of the three regression equation are described in the results chapter.

Coding Qualitative Data

Three items in the Client Physical Health In Psychotherapy Measure were open-ended responses: “In a few words, please describe the physical health issue(s) you talked about,” “How did your therapist respond to you talking about a physical health issue?,” and “Please describe why you chose not to talk about this physical health issue?”

Three items in the Therapist Physical Health in Psychotherapy Measure were open-ended responses: “In a few words, please describe the physical health issue(s) your client talked about,” “How did you respond when your client talked about the physical health issue(s)?,” and “What gave you that sense [that your client chose not to talk about a physical health issue]?”

Because qualitative data from these questions were considered brief and not complex, these questions were analyzed using a modified consensual qualitative research method (CQR-M; Spangler, Liu, & Hill, 2012). This coding process involves two stages of coding. First, the primary researcher worked with another graduate student judge to develop domains based on the responses from 15 sessions. Following the development of the domains, the coding group was expanded to add a third member to audit and modify

the domains through analyzing another 15-session subset of responses. Finally, the remaining open-ended responses were coded by each member of the team using the final codes and then discussed to achieve consensus. These coding results then applied the labels “general” to indicate all or almost all cases, “typical” to indicate at least half of cases, “variant” to indicate fewer than half, and “rare” to indicate one or two cases (Hill et al., 2005).

Chapter 4: Results

Data Collection

Data collection began on June 20, 2016 and ended May 25, 2017, for a total data collection period of about 11 months. Data were collected on clients who had begun psychotherapy prior to the June start date as well as all clients who began therapy after that date. Data collection began at the intake session for 36 of 54 clients (66.7%). The other 18 clients had completed 8 to 70 sessions (m= 33.3, SD=19.09) prior to the start of data collection These 18 clients did not answer the question asked at intake of all clients who began psychotherapy after the start date to list any physical health conditions they have and then to rate the severity of each condition. Therefore completed only post-session surveys for this study.

There were 964 sessions that occurred during the 11-month data collection period among 54 clients and 11 therapists. For these sessions, therapists failed to complete post-session questionnaires for three sessions (0.3%) and there was no missing therapist data for the remaining 961 sessions included in the final data set. Clients completed post-session questionnaires for all but six sessions (0.2%) therefore, there were 958 total sessions included in the final dataset from the client perspective. Because there were so few sessions for which data were missing, sessions were removed automatically, list-wise by the SPSS data analysis program and no further computations were done to account for missing data.

Descriptive Analyses

Because this was an exploratory study and given that no previous studies were found that examined this topic in individual psychotherapy, frequencies, means, and

correlations of health-related variables related to the research questions of interest. This section presents descriptive data that is both quantitative and qualitative to describe the findings related to the main research questions.

Demographics. A total of 54 clients participated in this study. These clients provided demographic information at intake, including age, gender, race, and highest level of education. At the beginning of data collection, 18 clients in the sample had already begun treatment at the clinic.

Clients ranged in age from 18 to 69, with a mean age of 34 years (*SD=12.72)*. The majority of clients identified as female (55.5%; *n=30*) and 44.4% (*n=24*) identified as male. In order to have groups of relatively equal size for statistical comparison based on racial identity, clients who identified as Asian, Latino/a, Indonesian American, and multiethnic were combined into one group and compared to participants who identified as White or Black. The sample included 44.4% (*n=24*) clients who identified as White/European American, 29.6% (*n=16*) identified as multiracial or other ethnicity, and 25.9% (*n=14*) identified as Black/African American. Finally, 52 clients provided information about their highest level of education. In order to have groups of relatively equal size for statistical comparison based on level of education, a categorization method was employed to collapse groups, so that analyses included three relatively equal groups: high school/some college, college degree, and some graduate school/graduate degree. The largest percentage of clients (42.3%; *n=22*) had earned a Bachelor's degree, followed by Master's degree (17.3%; *n=9*), High School (13.5%; *n=7*), other (e.g., some college) (9.6%; *n=5*), currently in college (7.7%; *n=4*), doctorate (5.8%; *n=3*) and currently in graduate school (3.8%; *n=2*).

A total of 11 therapists participated in this study. These therapists provided demographic information when they first began work at the clinic, including age, gender, and race. Therapists ranged in age from 25 to 67, with a mean age of 31years (*SD=12.06)*. The majority of therapists identified as female (72.7%; *n=8*) and 27.3% (*n=3*) identified as male. In terms of racial identity, 81.8% (*n=9*) identified as White/European American and 18.2% (*n=2*) identified as Asian American or Asian American/International. Therapists saw between 2 and 10 clients during the course of the study.

Intake Data.

Quantitative Analyses. To address the research questions asking how many physical health issues clients reported at intake (RQ1a) and how clients rated the severity of physical health issues reported at intake (RQ1b), clients were asked at intake to list any physical health issues they had and then to rate those issues on a 0 to 10 scale of condition severity. Because 18 clients had already had their intake session prior to the start of this study, those clients did not provide this data at intake. Of the 36 clients who were asked these questions at intake, 33 completed these questions. Therefore, intake data related to physical health issues was present for 33 of the 54 clients (61.1%). Clients could list up to five physical health issues, and the range of number of issues listed was 0 to 4. About 70 percent (*n*=23) of clients listed at least one physical health issue. Ten clients (30.3%) listed zero issues, 7 clients (21.2%) listed 1 issue, 10 clients (30.3%) listed 2 issues, 3 clients (9.1%) listed 3 issues, and 3 clients (9.1%) listed 4 issues. The mean number of issues listed was 1.45 (*SD*=1.28).

All clients who listed a health issue provided a description of their first physical health issue. Sixteen clients described a second physical health issue; six clients described a third issue; and three clients listed a fourth physical health issue.

In calculating the severity ratings for physical health issues listed by each client, responses of "none," "n/a," and "nothing noteworthy" were removed. There were 43 physical health issues that were rated for severity by the 33 clients that completed these questions at intake. The mean severity rating for these issues was 4.93 (*SD*=2.51), which is approximately the middle of the 0 to 10 severity scale, and the range was 1 (*n=4)* to 10 (*n=2)* with a mode severity of 3 (*n*=9).

Qualitative Analyses. To answer the research question examining what physical health issues clients report at intake (RQ1c), clients responded to an open-ended question about any physical health issues they had (See the quantitative section above, RQ1a). As clients were asked first at intake to describe any physical health issues they have and were subsequently asked to describe any physical health issues they talked about in session after each one, codes were developed using CQR-M to capture categories of physical health issues based on intake and post-session data, and these categories were applied to both intake and post-session data for purposes of consistency and comparison. The domains that emerged from the CQR-M analysis included sleep/fatigue, weight, diet/exercise, pain, illness, medication/medical procedures, mental health, sensory and perceptual issues, and other/unclear. Of the 26 clients who listed at least one physical health issue, pain was close to a "typical" response (*n=12, 46%),* followed by "variant" responses of weight (*n=10, 38%),* illness (*n=5, 19%),* mental health (*n=4, 15%),* diet/exercise *(n=3, 12%),* and sensory and perceptual issues *(n=3, 12%).* Sleep was a

"rare" response (*n=2, 8%)*, as was other/unclear (*n=2, 8%)* and Medication/Medical Procedures (*n=0, 0%).*

Physical Health Issues that are Talked About in Session.

Quantitative Analyses. To answer the research question how often do therapists (RQ3a) and clients (RQ2a) report that they discuss a health issue in session, descriptive statistics, including frequencies, percentages, and means were calculated for sessions when clients or therapists reported that they talked about a physical health issue. Table 2 presents how many physical health issues were reported in each therapy case from therapist and client perspectives. The following subsections describe results from both perspectives.

Therapist Perspective. Of the 11 therapists who participated in the study, all but one (91%) reported at least one session that contained discussion of a physical health issue, and the only therapist who did not report discussing a health issue with a client completed this survey for only seven client sessions. The rate at which each therapist reported talking about a physical health issue in the session is displayed in Table 3. Of the 961 sessions in the final therapist perspective sample, therapists reported talking about a physical health issue in 124 sessions (12.9%). The average number of sessions in which a physical health issue was reported from the therapist perspectives was 11.3. To gain an average percentage of sessions where therapists endorsed a physical health issue, averages were first obtained for each therapist's set of sessions and then these were averaged across therapists. The average was 17.1% across therapists. The session numbers for each reported instance were examined to determine a range and average.

Table 2

Number of Physical Health Issues Reported By Client and Therapist by Case

Client Number	# of Health Issues Reported By Therapist	# of Health Issues Reported By Client
1	4	4
2	--	3
3	9	4
4	--	--
5	6	--
6	2	--
7	--	--
8	1	--
9	2	2
10	--	--
11	--	--
12	4	3
13	2	5
14	4	1
15	--	--
16	--	--
17	--	--
18	3	2
19	2	--
20	9	7
21	10	13
22	3	1
23	--	--
24	--	1
25	6	--
26	--	--
27	2	1
28	5	4
29	9	17
30	--	--
31	--	--
32	--	--
33	--	--
34	21	13
35	2	2

36	2	--
37	--	--
38	1	3
39	15	11
40	--	--
41	12	8
42	18	5
43	1	1
44	5	2
45	4	2
46	3	--
47	8	2
48	--	3
49	3	2
50	--	--
51	8	4
52	2	1
53	--	1
54	9	7

Therapists reported a client discussing a physical health issue on average during the 17th session (range = intake to session 60, *SD=15.48).* As average session number of report could have been affected by cases in which therapists began completing the survey about their work with clients that had already begun therapy, average was also computed for therapist cases that began at intake. For these cases, the average was session 11 (*M*=11.07, *SD*=9.21). The distribution of session number was non-normally distributed, with a skewness of .953 (SE = .244). Therefore, results concluded that therapists who provided data beginning at intake reported talking about a physical health issue with their clients on or before session 11.

Table 3

Rate of Report of a Physical Health Issue(s) Therapist Perspective

			Reported		Sense that Chose Not to Report	
Therapist	Client	Total Session	# Session	% Session	# Session	% Session
1	1	11	2	18.2%	0	--
1	2	27	0	--	0	--
1	3	27	7	25.9%	0	--
2	4	6	0	--	0	--
2	5	6	6	100%	0	--
2	6	3	2	66.7%	0	--
3	7	3	0	--	0	--
3	8	3	1	33.3%	0	--
3	9	1	1	100%	0	--
4	10	4	0	--	0	--
4	11	3	0	--	0	--
5	12	45	2	4.4%	0	--
5	13	19	1	5.3%	0	--
5	14	37	2	5.4%	0	--
5	15	27	0	--	0	--
5	16	13	0	--	0	--
6	17	3	0	--	0	--
6	18	5	1	20%	0	--
6	19	5	1	20%	0	--
7	20	29	4	13.8%	0	--
7	21	13	6	46.2%	2 (of 7)	28.6%
7	22	14	3	21.4%	0	--
7	23	4	0	--	0	--
8	24	8	0	--	0	--
8	25	11	4	36.3%	0	--
8	26	37	0	--	0	--
8	27	2	2	100%	0	--
8	28	30	2	6.7%	0	--
8	29	17	7	41.2%	0	--
8	30	18	0	--	0	--
8	31	7	0	--	0	--
8	32	9	0	--	0	--
8	33	5	0	--	0	--
9	34	42	10	23.8%	0	--
9	35	3	1	33.3%	0	--

9	36	38	1	2.6%	0	--
9	37	30	0	--	0	--
9	38	20	1	5%	0	--
9	39	42	9	21.4%	0	--
9	40	11	0	--	0	--
10	41	26	7	26.9%	0	--
10	42	36	12	33.3%	0	--
10	43	2	1	50%	0	--
10	44	12	2	16.7%	0	--
10	45	29	2	6.9%	0	--
10	46	22	2	9.1%	0	--
10	47	17	5	29.4%	0	--
10	48	18	0	--	0	--
11	49	39	2	5.1%	0	--
11	50	40	0	--	0	--
11	51	10	6	60%	0	--
11	52	35	2	5.7%	0	--
11	53	19	0	--	0	--
11	54	18	7	38.9%	0	--

Of the 124 sessions in which therapists reported that a physical health concern was talked about in session, only 8 (6.5%) of those reports came at the intake session. This is notable give that the therapist guide for initial intake interview at the clinic used in this study includes a question about physical health,

Descriptive statistics were also calculated when therapists answered “yes” to the question of whether they had talked with their client about a physical health issue during that session. These questions were: Who initiated talking about the physical health issue(s)?; Is this the first time you have talked about this physical health issue(s) with your client?; How much do you feel the physical health issue(s) relates to your client’s mental health?; We talked about the physical health issue(s) in depth; and We talked about how the physical health issue(s) relates to the client’s psychological issue(s).

Results found that there were 124 sessions in which therapists reported that they talked about physical health issues with their clients. In 28 of these sessions (22.6%) therapists reported that they initiated the conversation, while they reported that clients initiated the discussion in 96 cases (77.4%). To address the research question "do physical health issues come up repeatedly or are the "one-off" conversations" (RQ2g), therapists were asked if it was the first time they had talked about the physical health issue with the client. For 29.0% of the time (*n*= 36) it was the first time and for the other 71% of sessions physical health issues had come up repeatedly. To address the research question "what are therapist attitudes about the relationship between physical and mental health" (RQ3d), therapists were asked to rate the extent to which the client's physical health issue related to their mental health, using a 5-point scale (where 0= not at all related and 4= extremely related). Analysis of results suggested that therapists responded 65.3% of the time that it was "very much" or "extremely related" (*n=81),* and responded only 13.7% of the time (*n*=17) that it was "slightly" or "not at all related" with a mean rating of 2.67 (*SD*=.95), which most closely corresponds with the rating "very much related."

To address the research question "in how much depth is the physical health issue talked about" (RQ3c), therapists were asked to rate their agreement with the statement "We talked about the physical health issue in depth," using a 5-point scale (1=strongly disagree, 3=neutral, and 5=strongly agree). The mean rating for this item was 3.02 (*SD*= 1.1), which most closely corresponded with "neutral." Forty-one therapists responded either "agree" or "disagree" (33.1%), 25 therapists said "neutral" (20.2%), 9 therapists said "strongly agree" (7.3%) and 8 therapists said "strongly disagree" (6.5%).

In seeking to understand the research question, “do therapists report talking to clients about how the physical health issue relates to psychological concerns” (RQ3e), therapists were asked to respond yes or no to the statement “We talked about how the physical health issue(s) relates to the client’s psychological issue(s).” Frequency analysis results indicated that 66.1% of therapists (*n*=82) said they had.

Client Perspective. Clients completed an average of 17.76 sessions (*SD*= 13.90) during the data collection time period. The majority of the sample of 54 clients reported a health issue in at least one session (*n=33;* 61.1%). The rate at which each client reported sessions containing a physical health issue is displayed in Table 5. Of the 958 sessions included in the final client dataset, a physical health issue was reported by clients in 113 sessions (11.8%). The average percentage of sessions in which a physical health issue was reported was first computed by calculating the percentage for each client and then averaging across clients to account for the variation in the number of sessions by client. A physical health issue was reported in an average of 15.7% of sessions per client. The session numbers for each reported instance were examined to determine a range and average. The average session number with a reported health issue was 15.9 (*SD = 16.62).* As average session number of report could have been affected by clients who began this study mid-treatment, average was also computed for the 36 clients who began the study at intake. For these cases, the average was session 11 (*M*=10.91, *SD*=9.14). The distribution of session number was non-normally distributed, with a skewness of .921 (SE = .254). Taken with the mean, this indicates that report of a physical health issue typically occurred on or before session 11.

Table 4

Frequencies and Percentages of Reported vs. Chose not to Report Physical Health Issue(s) (Client Perspective)

		Reported Talking About PHC		
		Yes	No	Total
Chose Not To	Yes	16 (41.0%)	0 (00.0%)	16 (41.0%)
	No	17 (43.6%)	6 (15.4%)	23 (59.0%)
	Total	33 (84.6%)	6 (15.4%)	

Table 5

Rate of Report of a Physical Health Issue(s) – Client Perspective

			Reported		Chose Not to Report	
Therapist	Client	Total Session	# Session	% Session	# Session	% Session
1	1	11	4	36.4%	0	--
1	2	27	3	11.1%	0	--
1	3	25	4	16%	0	--
2	4	2	0	--	0	--
2	5	2	0	--	0	--
2	6	1	0	--	0	--
3	7	2	0	--	0	--
3	8	2	0	--	0	--
3	9	1	1	100%	1	100%
4	10	2	0	--	0	--
4	11	2	0	--	0	--
5	12	47	3	6.4%	0	--
5	13	20	5	25%	0	--
5	14	39	1	2.5%	0	--
5	15	31	0	--	0	--
5	16	13	0	--	0	--
6	17	2	0	--	0	--
6	18	5	2	40%	2	40%
6	19	4	0	--	0	--
7	20	33	5	15.2%	0	--
7	21	16	5	31.3%	0	--
7	22	15	1	6.7%	0	--
7	23	4	1	25%	0	--
8	24	8	1	12.5%	0	--

8	25	9	0	--	0	--
8	26	33	6	18.2%	3 (of 27)	11.1%
8	27	2	1	50%	1 (of 1)	100%
8	28	31	4	12.9%	1 (of 27)	3.7%
8	29	18	11	61.1%	5 (of 7)	71.4%
8	30	19	1	5.3%	0	--
8	31	7	0	--	0	--
8	32	10	1	10%	0	--
8	33	5	0	--	0	--
9	34	42	11	26.2%	2 (of 32)	6.3%
9	35	3	2	66.7%	1 (of 2)	50%
9	36	37	0	--	0	--
9	37	31	0	--	0	--
9	38	19	3	15.8%	0	--
9	39	42	7	16.7%	0	--
9	40	10	0	--	0	--
10	41	27	7	25.9%	4 (of 20)	20%
10	42	36	3	8.3%	0	--
10	43	1	1	100%	1 (of 1)	100%
10	44	12	2	16.7%	0	--
10	45	29	1	3.4%	0	--
10	46	22	0	--	1	4.5%
10	47	16	1	6.3%	0	--
10	48	17	1	5.9%	0	--
11	49	41	2	4.8%	1 (of 38)	2.6%
11	50	41	0	--	0	--
11	51	10	4	40%	0	--
11	52	35	1	2.9%	34 (of 34)	100%
11	53	20	1	5%	0	--
11	54	18	6	33.3%	0	--

When a client answered “yes” to the question of whether they had talked about a physical health issue during the just-completed, session, they were then asked to respond to the following questions: Who initiated talking about the physical health issue(s)?; Is this the first time you have talked about this physical health issue(s) with your therapist?; How distressed were you by the physical health issue, prior to sharing?; How much do you feel the physical health issue(s) relates to your mental health?; How do you feel

about having talked about the physical health issue(s)?; and We talked about the physical health issue(s) in depth.

Of 113 sessions where clients reported talking about a physical health issue, frequency analysis to address the question who do clients report initiates talking about the physical health issue indicated that clients perceived that they initiated talking about the physical health issue 73.5% of the time (*n*=83), and 26.5% (*n* = 37) of the time clients reported that the therapist initiated this discussion. Frequency analysis to answer the question do physical health issues come up repeatedly or are the "one-off" conversations (RQ2g) indicated that it was the first time they had talked about it 32.7% of the time (*n*= 37), indicating that in about 67% of cases the physical health issue had come up repeatedly.

To answer the research question "how much distress do clients report about the physical health issue they talk about" (RQ2d), frequency analysis was conducted. Results demonstrated that clients reported 62% of the time that they were "moderately" (31.2%), "very" (24.7%) or "extremely distressed" (6.5%), with clients answering "not at all distressed" 19.4% of the time and "slightly distressed" in 18.3% of cases. The mean level of distress was 1.81 (*SD*= 1.20), which most closely corresponds to a rating of "moderately distressed."

In order to address the research question "when they talk about a physical health issue, what are client attitudes about the relationship between physical and mental health" (RQ2c), frequency analysis indicated that clients responded "very much" or "extremely related" 58.5% of the time, with 19.1% answering "moderately related" and 22.3%

answering either “slightly” or “not at all related.” The mean rating was 2.52 (*SD*=1.22), which most closely corresponds to the rating “very much related.”

Mean and frequency analyses was conducted to address how positively clients felt about talking about the physical health issue (RQ2f) and the average client response was 2.22 (*SD*= .99), which most closely corresponds to the rating “moderately positively.” In 69.1% of responses, clients answered “moderately positively” or “very positively,” with 20.3% responding “slightly positively” or “not at all positively.”

Table 6

Summary of Descriptive Analyses for Sessions with Report of a Physical Health Issue(s)

Therapist Perspective	**Client Perspective**
• 12.9% of sessions included a PHI • 91% of therapists reported talking about a PHI in at least one session • Clients initiated talking about a PHI 77.4% of the time • The PHI had been previously talked about 71% of the time • PHIs were “very much” or “extremely” related to mental health • Depth of discussion of the PHI was rated as “neutral” • 66.1% of the time, therapists said they talked to clients about the relationship between the PHI and mental health	• 11.8% of sessions included a PHI • 61.1% of clients reported talking about a PHI in at least one session • Clients initiated talking about a PHI 73.5% of the time • The PHI had been previously talked about 67% of the time • PHIs were “very much” related to mental health • Depth of discussion of the PHI was rated as “neutral.” • PHIs that were talked about were “moderately” distressing. • Clients felt “moderately positively” about talking about the PHI

Finally, to address the research question “in how much depth is the physical health issue talked about” (RQ2f) mean rating was calculated for depth and was 3.07 (*SD*= .89), which most closely corresponds with the response “neutral.” Frequency analysis showed that clients answered “neutral” 42.6% of the time, with 34.1% answering “disagree” or “strongly disagree” and 24.5% responding “agree” or “strongly agree.”

Qualitative Analyses. As described in the Methods chapter, for each of the following analyses, a team of raters followed guidelines for CQR-Modified, with a team of two raters generating initial themes from a random sample of data, which were then audited and refined by a third rater. Final codes were then applied to the full client and therapist data sets.

Therapist Perspective. CQR-M coding results were applied to the data to address the research question what physical health issues do therapists report clients talk about in session (RQ3b). Table 7 shows the occurrence of the various types of physical health issues clients and therapists reported were talked about in therapy sessions as described in a few words. There were 958 sessions included in this part of the study. As described above, reported physical health issues were coded into eight content categories, plus one additional category for those physical health issues deemed to be "other/unclear" by the coding team.

In the 124 sessions where discussion of a physical health issue occurred, most responses were "variant," including Sleep/Fatigue (*n = 34, e.g. sleep, exhaustion, tragedy in client's family has made her experience trouble sleeping*), Pain (*n = 32, e.g., migraines, hemorrhoids, pain during intercourse*), Diet/Exercise (*n = 24, e.g. diet, the client talked about needing to diet/exercise*), and Medication/Medical Procedures (*n = 22, e.g. Client is still waiting on results from an MRI he got last week., currently in physical therapy for pain, medication he is taking has drowsiness side effects*).

Table 7

Content of Reported a Physical Health Issue(s) (Client & Therapist Perspectives)

	Total PHC (Client)	Total Clients	Total PHC (Therapists)	Total Therapists
	N =	N =	N =	N =
Sleep/Fatigue	32 (V)	15	35 (V)	14
Weight	19 (V)	10	19 (V)	10
Diet/Exercise	12 (V)	6	24 (V)	13
Pain	14 (V)	7	32 (V)	13
Illness	19 (V)	10	10 (V)	7
Medication/Medical Procedures	6 (V)	4	22 (V)	12
Mental Health	9 (V)	6	17 (V)	9
Sensory & Perceptive Issues	7 (V)	6	8 (V)	5
Other/Unclear	29 (V)	12	30 (V)	16
Total	147		197	

* G= General, T= Typical, V= Variant, R=Rare

Client Perspective. From the client perspective to address the research question "what physical health issues do clients report that they talk about with therapists in session" (RQ2b), CQR-M results indicated that most responses were "variant," and included Sleep/Fatigue (*n = 30, e.g. sleep, sleep and tiredness, not sleeping well*), Weight (*n = 21, e.g. weight, overweight*), Illness (*n = 19, e.g. illness, I was sick during the appt., dealing with a case of food poisoning*), and Pain (*n = 15, e.g., migraines, back and headache hurts, arthritis*) (See Table 7).

Therapist Response to Physical Health Issues.

Qualitative Analyses. To address the research question "how do therapists respond to the clients' discussion about the physical health issue" (RQ4a & RQ4b), consensual qualitative research – modified protocol were used and yielded domains and

core ideas that were applied to the data from both client and therapist perspectives. Table 8 shows the frequencies related to how clients and therapists perceived that the therapist responded to the client's report of a physical health issue in the session. In terms of domains, raters determined that there were five domains with further defined core ideas, plus one additional domain for responses deemed unclear by the coding team. The domains were: 1) exploration, the therapist facilitated examination of thoughts and feelings; 2) insight, the therapist helped the client gain understanding; 3) action, the therapist helped the client make changes; 4) general positive, a vague description of a positive response; and 5) general negative, a vague description of a negative response. Responses could be coded into one or more category. There were 52 sessions for which both clients and therapists reported a PHI was discussed in that session.

Therapist Perspective. The majority of therapist responses (64%) were coded in two or three categories. From the therapist perspective, responses that were categorized in the exploration domain were "typical" (83%, *n*= 103), those that were categorized as insight were also "typical" (65%, *n*= 80), responses coded as action were "variant" (13%, *n*=15), and those coded as general positive were "rare" (0.2%, *n=2*). No responses were coded as general negative. Four responses were unclear or did not fit into one of the domains. For example, one therapist wrote, "*Ct did not have any issues, her parents did*." Examples of responses categorized as exploration included, "*I asked more questions about them, the client had been to a few doctors so she told me about the appointments*," and "*Made space for him to express feelings*." Examples of insight included, "*Exploring what it would mean to lose the weight to the client. In the client's view, losing the weight will solve all of his interpersonal problems. The work is becoming geared toward*

changing this misconception," and "*In the session, I was interested not in the eating behavior so much as what was the emotion in the emotional eating. The client talked about being depressed and lonely during high school and I tried to help him think about these feelings playing a role as much as his conscious choices.*" Examples of action included, "*Know he has been having sleep irregularities and also feeling down. I reviewed sleep hygiene practices with the client and encouraged him to implement what he could to see if sleep effects could improve his mood, or at least isolate other variables like medication, drugs/alcohol, or life stressors*," and "*The client is interested in adding some structure to their life after a recent friendship ending. We talked about sleep patterns in particular and I recommended focusing on consistent sleep/wake times and using melatonin instead of marijuana. The client is taking medication from a psychiatrist, and we also discussed benefits of giving the medication time to work by taking it consistently without other interference (from alcohol or drugs).*" An example of general positive included, "Respect for the client's autonomy."

Client Perspective. From the client perspective, most responses (83%) were coded in only one category. From the client perspective, "typical" responses were those coded as exploration (*n=64,* 57%). "Variant" responses included general positive (*n=15,* 13%), action (*n=13,* 12%), and insight (*n=12,* 11%). Responses coded general negative (*n=1,* 1%) were "rare". Additionally, in seven instances (6%), it appeared that the clients did not understand or were uncertain about the question. For instance, one person wrote: "*Can visualize it.*" Examples of exploration included, "*Interested*," and "*Just asked about to get a better understanding.*" Examples of insight included, "*Explained my issue and why stress related*," and "*She helped me to relate my physical symptoms with potential*

emotional stress." Examples of action included, "*Came up with plan to address*," and "*I have a lot of issues in me, my therapist will find somebody for me who can work this problem with me out*." Examples of general positive included, "*Very positive*," and "*Positively since I was talking about dealing with it.*" An example of a general negative response was, "*Laughed it off.*"

Table 8

Therapist Response to Report of Physical Health Issue(s)

Reported Response	Total Reports (C) N = 113	Total Clients N = 31	Total Reports (T) N = 124	Total Therapists N =
Exploration	64 (T)	25	103 (T)	10
Elicited Thoughts and Feelings	3	3	30	9
Asked for More Information	12	9	32	9
Approval Reassurance	18	9	17	8
Expressed Empathy	19	12	12	3
Expressed Curiosity	14	5	9	4
Neutral	8	8	3	3
Insight	12 (V)	10	80 (T)	7
Explored Meaning	7	6	19	6
Examined Maladaptive Behavior	1	1	12	6
Discuss Relationship B/W Physical and Mental Health	4	3	49	7
Action	13 (V)	10	15 (V)	5
Suggested Strategies	13	10	15	5
General Positive	15 (V)	10	--	--
General Negative	1 (V)	1	--	--
Unclear	7 (V)	5	4 (V)	3

* G= General, T= Typical, V= Variant, R=Rare

Health Issues that are not Talked About.

Quantitative Analyses.

Therapist Perspective. After each session in which therapists indicated they did not talk with their client about a physical health issue(s), they were asked "Did you get the sense that your client chose not to disclose a physical health issue(s) in this session?" In addressing the research question "do therapists suspect clients have a physical health issue(s) they are not talking about" (RQ8e), therapists indicated that they got that sense in only 2 instances (.2%) and said they did not in 99.8% of sessions (*n*= 835).

Client Perspective.

After each session, clients answered the question "Do you have a physical health issue(s) that you chose not to talk about with you therapist?" There was a very small number of sessions (*n*= 57, 5.9%) in which clients chose not to talk about a physical health issue(s).

To address the question "how often do clients have a physical health issue(s) that they do not talk about in therapy" (RQ8a), frequency analyses were performed and indicated that clients reported in 57 of 958 sessions (5.9%) that they had a physical health issue but chose not to talk about it. Thirteen clients reported this at least once during the study.

Clients were also asked "how distressing do you find the physical health issue(s) you did not disclose?" to address the research question "how much distress clients reported about the physical health issue(s) they did not talk about in therapy" (RQ8b). The mean score of responses was 1.5 (*SD*=.94), which most closely corresponds to "slightly distressing." Thirty-four (65.4%) responses indicated that the issue was "slightly

distressing," followed by very distressing (*n*=8; 15.4%), "moderately distressing" (*n*=6; 11.5%), and "extremely distressing" and "not at all distressing" (both *n*=2; 3.8%).

When clients had a health issue but chose not to talk about it they were asked "how much do you feel the physical health issue(s) relates to your mental health" to address the research question "what are client attitudes about the relationship between physical and mental health" (RQ8c). Results indicated a mean score of 1.69 (*SD*=1.00), which most closely corresponds with the response "moderately related." The most number of respondents indicating "slightly related" (*n*=29; 55.8%), followed by "moderately related" (*n*=11; 21.2%), "very much related" (*n*=7; 13.5%), "extremely related" (*n*=4; 7.7%), and "not at all related" (*n*=1; 1.9%).

Qualitative Analyses. Qualitative data also examined occurrence of clients' decision not to talk about a physical health issue(s) to better understand the experience of talking about physical health in psychotherapy.

Therapist Perspective. To address the research question when therapists' sense clients have a physical health issue(s) they are not talking about (RQ8f), what gives them that sense, CQR-M analyses were planned. However, therapists responded only twice that they sensed their client had a health issue that they chose not to talk about so this data was not coded. The two responses were offered by the same therapist about the same client, four sessions apart: "She mentioned her skin issues but did not go into them" and "This client always talks about physical health so when it doesn't come up I assume she just chose not to discuss it."

Client Perspective. When clients were asked if there was a physical health issue(s) they chose not to talk about in the session, they were asked to provide the reason

for not bringing it up (RQ8d). These reasons were coded for themes. Raters identified three themes with an additional category for responses that were other/unclear. The three themes were “not relevant”, “didn’t come up”, and “time/priorities.” In 57 sessions clients reported that there was a health issue they chose not to bring up. In 14 cases, the client did not provide a reason why they did not bring up the issue, yielding 43 observations that were coded by researchers. Reponses coded as not relevant were “typical,” (*n= 27;* 62.8%*),* followed by “variant” responses time/priorities (*n= 14;* 32.6%*),* and didn’t come up (*n= 3;* 7%*)*. Only one response was coded with more than one category (time/priorities & didn’t come up and only one was coded as other/unclear. Table 9 presents the responses from clients. Examples of responses coded not relevant included, “*It was not relevant during the session*,” and “*Irrelevant.*” Examples of responses coded time/priorities included, “*Outside of present concerns and my objectives for psychotherapy*,” and “*Limited time.*” Examples of responses coded didn’t come up included, “*Didn't naturally come up in the conversation, focused on other issues instead*,” and “*Didn’t think of it*.”

Table 9

Reasons Clients did not bring up a Physical Health Issue(s)

Reported Response	Total Reports N = 43*	Total Clients N = 12
**reports could receive more than one code*		
Not Relevant	27 (T)	5
Didn’t Come Up/Ask	3 (V)	2
Time/Priorities	14 (V)	5
Unclear/Other	1 (R)	1

* G= General, T= Typical, V= Variant, R=Rare

Table 10

Means, Standard Deviations, and Correlations of all Measures completed by Both Clients and Therapists

Measure	N	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. WAIC-SR	1517	48.83	8.61	--															
2. RRIC	1518	51.25	6.14	.64**	--														
3. SES client	1568	22.41	3.17	.66**	.55**	--													
4. WAIT-SR	905	44.51	8.11	.06	.14**	.00	--												
5. RRIT	905	46.47	7.21	.06	.10**	-.02	.77**	--											
6. SES therapist	938	20.22	3.09	.09**	.15**	.18**	.70**	.52**	--										
7. ReportC	958	1.88	.32	-.02	.05	.01	.03	-.01	.01	--									
8. InitiatedC	113	1.27	.44	.12	-.18	-.22*	-.16	-.04	-.19	--	--								
9. FirstTimeC	113	1.67	.47	.17	.00	.03	.20*	.22*	.09	--	.21	--							
10. DepthC	94	3.07	.89	.20	.15	.25*	.06	.04	.03	--	.09	.09	--						
11. AttitudeC	94	2.52	1.22	-.23*	-.32**	-.03	.20	.19	.23*	--	-.12	.13	.19	--					
12. ReportT	938	1.87	.33	-.01	.06	.04	.00	-.02	.01	.44**	.26**	-.03	-.10	-.11	--				
13. InitiatedT	118	1.77	.42	.09	.06	.27**	-.01	.05	.08	-.14	-.47**	-.19	.00	.05	--	--			
14. FirstTimeT	118	1.73	.45	.01	.16	-.04	.17	.14	.16	.11	.10	.46**	.07	-.08	--	-.11	--		
15. DepthT	118	3.03	1.08	.14	.14	.16	.12	.12	.18	-.30**	-.02	.13	.20	-.05	--	.00	.16	--	
16. AttitudeT	118	2.71	.91	-.11	.08	-.03	-.06	-.05	.07	.06	.06	-.04	.27	.11	--	.27**	.27**	.14	--

Note. WAIC-SR = Working Alliance Inventory Short Revised, Client Version; RRIC = Real Relationship Inventory, Client Version; SES client = Session Evaluation Scale- Client Version; WAIT-SR= Working Alliance Inventory Short Revised, Therapist Version; RRIT = Real Relationship Inventory, Therapist Version; SES therapist = Session Evaluation Scale- Therapist Version; ReportC = Presence of Report of PHC by client; InitiatedC = Client perception of who initiated talking about PHC; FirstTimeC = Client perception of whether first time PHC reported; DepthC = Client perception of degree of depth PHC talked about; AttitudeC = Client attitude about relationship between PHC and mental health; ReportT = Presence of Report of PHC by therapist; InitiatedT = Therapist perception of who initiated talking about PHC; FirstTimeT = Therapist perception of whether first time PHC reported; DepthT = Therapist perception of degree of depth PHC talked about; AttitudeT = Therapist attitude about relationship between PHC and mental health.
***significant at the .01 level* *significant at the .05 level*

Inferential Analyses

Relationships between Reports of Physical Health Issues and Post-Session Measures.

While one primary aim of this study was to describe if and how physical health is talked about in psychotherapy, another aim was to see if talking about physical health during a session influenced session outcome measures. To addresses the research question "how does talking about a physical health issue in session affect post-session scores of the Real Relationship (RQ5a & RQ5b), Working Alliance (RQ6a & RQ6b), and Session Evaluation (RQ7a & RQ7b)" from therapist and client perspectives, descriptive analyses and regressions were conducted and results are presented below. Table 7 provides descriptive data for both therapist and client data, including means, standard deviations, and correlations for the Physical Health in Psychotherapy and post-session measures (Real Relationship, Working Alliance - Short Revised, and Session Evaluation Scale).

Client Perspective Mean Comparisons. Clients were asked after each session if they talked about a physical health issue with their therapist during the session. When they did, clients were next asked who initiated talking about a physical health issue (PHI), whether the current session was the first time the PHI had been reported, depth of discussion about the PHI, distress about the PHI, positive feeling after report of the PHI, and attitude about the relationship between their physical issue and their mental health. Clients also completed process measures after each session, including the Working Alliance Inventory – Short Revised, the Real Relationship Inventory, and the Session Evaluation Scale. The questions about interactions related to physical health issues were examined to assess their relationships to post-session process measures (Working

Alliance Inventory-Short Revised (WAI-SR), Real Relationship Inventory (RRI), and Session Evaluation Scale (SES)).

Independent samples T-tests were performed to compare scores of client-rated scores of Working Alliance, Real Relationship, and Session Evaluation based on client responses to dichotomous items from the Physical Health in Psychotherapy Measure. Grouping variables for each t-test included report vs. no report of a physical health issue, who initiated talking about the PHI, and whether it was the first time talking about the physical health issue. Results indicated that there was no significant effect for reporting or not reporting a physical health issue on client's ratings of WAI-SR *(t*(924)=.69, *p*=.49) (*d*= .08), RRI *(t*(924)=-1.62, *p*=.11) (*d*= .16), or SES *(t*(957)=-.25, *p*=.80) (*d*= .02). Results indicated that there was no significant effect for whether or not it was the first time talking about the physical health issue on client's session ratings on the WAI-SR, RRI, or SES.

T-test results indicated that there was no significant effect for who initiated talking about the physical health issue on the WAI-SR or RRI, but a significant, medium effect was found on SES (*t*(111)=2.45, *p*=.017 (*d*= .53). This result indicated that sessions where the client reported that they had initiated talking about the physical health issue had higher session evaluation scores (*M*= 22.64) than sessions where clients reported that the therapists initiated talking about it (*M*= 21.17).

An independent samples t-test was also conducted to examine whether scores of Working Alliance, Real Relationship, and Session Evaluation differed by clients' decision to not discuss a physical health issue during a session. Analyses of this dichotomous grouping variable and the three outcome variables provided data about the

assumption of homogeneity of variances, and the Levine's Test for equality of variance statistic for RRI (p= .002) and SES (p= .008) indicated that the assumption had been violated. Therefore, the t statistics for equal variances not assumed were used for these two outcome variables, and equal variances assumed significance level was used for the Working Alliance t-test. Results indicated that there was not a significant mean difference on scores of the Real Relationship (t=1.91, p=.06). However, significant differences were found on scores of the Working Alliance (t=3.22, p<.01) and Session Evaluation (t=4.30, p<.01). The effect sizes were close to medium for working alliance (d= .49) and session evaluation (d= .48). These results indicated that mean scores of client-rated quality of session (SES) were higher when they had a PHI they chose not to talk about (M= 23.56) than when they did not (M= 22.23). Additionally, mean scores of client-rated working alliance were higher when they had a PHI they chose not to talk about (M= 52.09) than when they did not (M= 48.21).

Modeling Outcomes - Client Perspective. Correlational analyses and t-test results suggested that some attributes about talking about physical health in psychotherapy may contribute to session outcome measures such as the real relationship, working alliance, and session evaluation. Therefore, models predicting each of these variables were built with predictor variables identified by the researcher as having theoretical value or statistical value illuminated by correlational or t-test results. Simultaneous regression analyses were used instead of hierarchical regression because there were no a priori hypotheses about these relationships. These three regressions are elucidated below.

A simultaneous regression was examined with client-rated WAI-SR as an outcome variable and following predictors: (1) who initiated talking about the physical

health issue (PHI), (2) whether the current session was the first time the PHI had been reported, (3) depth of discussion about the PHI, (4) distress about the PHI, (5) positive feeling after report of the PHI, and (6) attitude about the relationship between physical and mental health. Results of the multiple linear regression indicated that these factors explained a significant portion of variance in scores of working alliance (R^2=.24, F(6, 81) = 4.23, *p*=.001). Effect size was medium (f^2 = .32). Depth (β= .30, *t*= 2.95, *p*=.004), distress (β= -.25, *t*= -2.19, *p*=.03), and attitude about relationship between PHI and mental health (β= -.25, *t*= -2.24, *p*=.03) predicted unique variance in ratings of the working alliance in sessions when a physical health issue was discussed. In other words, clients' perception of talking about the physical health issue in more depth was related to higher scores of the working alliance, the higher the level of distress they associated with the PHI the lower the scores of working alliance. Additionally, the greater the client's attitude about the relationship between the PHI and their mental health, the lower the scores of post-session working alliance.

A similar simultaneous regression as reported above was conducted, only this time with the RRI as the outcome variable. Predictors included: whether the current session was the first time the PHI had been reported, depth of discussion about the PHI, distress about the PHI, positive feeling after report of the PHI, and attitude about the relationship between physical and mental health. Results of the multiple linear regression indicated that these predictor variables accounted for a significant amount of variance (19%) in predicting RRI (R^2=.19, F(5, 82) = 3.75, *p*<.01). Effect size was medium (f^2 = .23). Depth (β= .23, *t*= 2.14, *p*=.035) and attitude about relationship between PHI and mental health (β= -.38, *t*= -3.33, *p*=.001) were significant predictors in the model. In

other words, clients' perception of talking about the physical health issue in depth and their attitude about the relationship between the PHI and their mental health predicted unique variance in post-session scores of the Real Relationship.

Finally, regression analysis was performed with the client-rated SES as the outcome variable using the following predictors: Who initiated talking about the PHI, depth of discussion about the PHI, distress about the PHI, positive feeling after report of the PHI, and attitude about the relationship between physical and mental health. Results indicated that the predictors accounted for a significant amount of variance in predicting SES (R^2=.23, F(5, 87) = 5.07, p<.001). Effect size was medium (f^2 = .30). The individual predictors were examined further and indicated that who initiated talking about the PHI (β= -.24, t= -2.50, p=.014), depth (β= .29, t= 2.91, p=.005), and attitude about relationship between PHI and mental health (β= -.17, t= 2.81, p=.006) were significant predictors in the model. In other words, in sessions where clients initiated discussion about the physical health issue, there were higher scores of client-rated session evaluation, as previously found in the t-test result examining this relationship. Additionally, as clients rated discussion of health issues as having more depth, higher scores were observed in client-rated session evaluation. Lastly, the degree to which clients perceive a relationship between the physical health issue and their mental health, the lower were client-rated scores of session evaluation.

Therapist Perspective Mean Comparisons. Therapists were asked after each session if they had talked about a physical health issue with their client during the session. When this occurred, therapists answered questions including who initiated talking about a physical health issue (PHI), whether the current session was the first time

the PHI had been reported, depth of discussion about the PHI, whether they talked about how the PHI relates to the client's mental health, and their attitude about the relationship between the client's physical and mental health. Therapists also completed process measures after each session, including the Working Alliance Inventory – Short Revised, the Real Relationship Inventory, and the Session Evaluation Scale. Relationships between these variables and the three session process variables were also examined.

T-tests were performed using therapist perspective grouping variables including report vs. no report of a physical health issue (PHI), who initiated talking about the PHI, whether it was the first time talking about the physical health issue, and whether they talked about how the PHI relates to the client's mental health and the outcome measures of therapist-rated WAI-SR, RRI, and SES. Results indicated that there was no significant effect for reporting a physical health issue on the WAI-SR, RRI, or SES. There was no significant effect for who therapists reported initiated talking about the physical health issue on the WAI-SR, RRI, or SES. Results indicated that there was no significant effect for whether or not it was the first time talking about the physical health issue on WAI-SR, RRI, or SES. Results indicated that there was no significant effect for whether they talked about how the PHI relates to the client's mental health on WAI-SR, RRI, or SES.

Modeling Outcomes – Therapist Perspective. Regression analyses were performed to try to identify variables that might account for a meaningful amount of variance in the outcome scores of WAI-SR, RRI, and SES, similar to those presented above from the client perspective. Predictor variables were those identified by the researcher as having theoretical value or statistical value through correlation and t-test results.

Regression analysis was performed with the therapist-rated WAI-SR as the outcome variable with the following predictors: How much the therapist felt the physical health issue relates to their client's mental health and whether therapist and client talked about the physical health issue(s) in depth. Results of the multiple linear regression indicated that the model was not significant (R^2=.02, F(2, 113) = .88, *p*=.42).

Regression analysis was performed with the therapist-rated RRI as the outcome variable with the following predictors: How much the therapist felt the physical health issue relates to their client's mental health and whether therapist and client talked about the physical health issue(s) in depth. Results of the multiple linear regression indicated that the model was not significant (R^2=.02, F(2, 113) = .84, *p*=.44).

Finally, regression analysis was performed with the SES as the outcome variable with the following predictors: How much the therapist felt the physical health issue relates to their client's mental health and whether therapist and client talked about the physical health issue(s) in depth. Results of the multiple linear regression indicated that the model was not significant (R^2=.03, F(2, 121) = 1.56, *p*=.22).

Table 11

Summary of Findings, T-Tests & Regressions

Therapist Perspective	**Client Perspective**
T-Tests • Reporting vs. Not Reporting a PHI: No significant effect on RRI, WAI, or SES • First time talking about the PHI: No significant effect on RRI, WAI, or SES • Initiating talking about PHI: No significant effect on WAI, RRI, or SES.	**T-Tests** • Reporting vs. Not Reporting a PHI: No significant effect on RRI, WAI, or SES • First time talking about the PHI: No significant effect on RRI, WAI, or SES • Initiating talking about PHI: No significant effect on WAI or RRI. **Significant effect on SES**

• Talked about how PHI related to mental health: No significant effect on RRI, WAI, or SES **Regressions** • WAI: Model not significant (R^2=.02, F(2, 113) = .88, *p*=.42) • RRI: Model not significant (R^2=.02, F(2, 113) = .84, *p*=.44) • SES: Model not significant (R^2=.03, F(2, 121) = 1.56, *p*=.22)	• Decision not to talk about PHI: No significant effect on RRI. **Significant effect on WAI and SES** **Regressions** • WAI: **Depth** (β= .30, *t*= 2.95, *p*=.004), **distress** (β= -.25, *t*= -2.19, *p*=.03), and **attitude about relationship between PHI and mental health** (β= -.25, *t*= -2.24, *p*=.03) predicted unique variance. • RRI: **Depth** (β= .23, *t*= 2.14, *p*=.035) and **attitude about relationship between PHI and mental health** (β= -.38, *t*= -3.33, *p*=.001) predicted unique variance. • SES: **who initiated talking about the PHI** (β= -.24, *t*= -2.50, *p*=.014), **depth** (β= .29, *t*= 2.91, *p*=.005), **and attitude about relationship between PHI and mental health** (β= -.17, *t*= 2.81, *p*=.006) predicted unique variance.

Post Hoc Analyses

Post Hoc Qualitative Analyses.

Client Perspective. Based on the qualitative coding to identify the types of physical health issues talked about in therapy, the researcher noted that simply identifying and categorizing the issue may have missed important differences in the issues discussed. Specifically, the range of health issues included flu, migraines, and cancer. In order to distinguish further among these described issues, the coding team identified three domains describing the temporal quality of the issue (PHQ1a): transient, chronic, and evolving. Items that did not match these three categories were coded as unclear/other. The "transient" domain refers to issues that were deemed to be fleeting, or likely to not affect the client for more than a few days. The "evolving" domain refers to

issues that were deemed to be progressing to an understanding about their nature, for example through medical testing, watchful waiting, etc. Finally, the "chronic" domain refers to issues that were deemed to be longstanding or have long-term effects. Development of these domains was inductive and informed by language used in the medical community for insurance coding. These codes were applied to the 113 physical health issues identified from the client perspective, as client descriptions were more likely to provide information into this temporal descriptor. While clients could have listed more than one health issue in the 113 observations, researchers identified only one temporal code for each observation. The coding team decided to apply the code that was rated the highest level of affect in instances where multiple health issues would have required two different codes. Results of the coding indicated that of the 113 issues, chronic issues were close to "typical" (n= 54, 47.8%), evolving issues were "variant" (n= 39, 34.5%), and transient issues were "variant" (n= 19, 16.8%). One response was unclear/other and considered "rare." In other words, nearly half of the reported health concerns might be described as chronic in nature (e.g., *migraine, weight, IBS/GERD*) and relatively few were transient in nature (e.g., *illness, accident, dealing with a case of food poisoning*).

Therapist Perspective. Though it was not part of the initial set of research questions, an examination of clients presenting problems was conducted to get a sense of these and how those may relate to physical health issues (PHQ2). After each intake session, therapists completed a description of the presenting problem. This description was completed by the therapist for 53 of 54 of the clients. In describing presenting problems, therapists could write as much as they wished and often described more than

one presenting issue. A team of coders identified 14 themes for the presenting problem. Applied to the data, one issue was considered "typical": relationships (*n*=28). "Variant" issues included anxiety *(n=19),* depression *(n=21),* grief and loss *(n=8),* behavior change *(n=5),* meaning in life *(n=3),* career *(n=6),* adjustment *(n=4),* self-image *(n=4),* emotion regulation *(n=8),* and other/unclear *(n=3).* "Rare" issues included trauma *(n=2),* physical health *(n=1),* and serious mental illness *(n=2).*

Post Hoc Quantitative Analyses.

Report of Physical Health Issue. As clients and therapists were both asked after each session whether or not they talked about a physical health issue during that session, we wanted to know how often clients and therapists matched in their reporting of these occurrences. There were 206 total sessions for which a client, therapist, or both reported talking about physical health. An examination of the "match" of these reports revealed that both therapist and client agreed that a physical health issue was discussed only 26.7% of the time. Further, within those 55 sessions (26.7%), content of the reported PHI also varied so that therapists and clients sometimes reported a similar description of the health issue and sometimes did not. Match of content was not coded for this study, though it could be in future studies.

Priming. Of the 54 total clients who participated in the study, 18 of these clients began the survey after their intake session. Therefore, only 36 of the 54 clients answered questions about their physical health at intake. As these participants may have been primed to think about their physical health from the beginning of therapy, some post hoc analyses were conducted to consider any possible priming affect (PHQ3). A t-test was conducted to test mean differences between the number of physical health issues reported

during therapy by clients who started the survey after the intake session and clients who began the study at intake. Results indicated that there was no significant effect for priming at intake (t=1.63, p=.11).

Age, Gender, and Education Level. Analyses were also done to examine whether the age, gender, or education level of clients may have influenced reporting or not reporting a physical health issue (PHQ4). Means and standard deviations for age for clients who did versus did not report at least one physical health issue in therapy are displayed in Table 3. Results of independent samples t-tests showed that there was no significant age difference between those participants who reported a physical health issue in therapy versus those who did not, t(52) =.93, p = .36. Chi square analyses revealed no significant difference in gender between reporters and non-reporters, $\chi(1) = 1.88.$, p = .39; no significant differences were found in race between reporters and non-reporters, $\chi(2) = 2.04$, p = .36; and no significant differences were found in education level between reporters versus non-reporters, $\chi(2) = .85$, p = .65. Tables 4 and 5 show the distributions of gender, race, and education level between clients who did versus did not report a physical health issue in at least one session.

Table 12

Comparison of Clients on Age

	Report		No Report		Chose Nonreport		No Nonreport	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Age	35.33	15.56	31.78	11.11	25.00	--	34.52	12.83

Table 13

Comparison of Clients on Gender, Race, and Highest Level of Education

	Report	No Report	Chose Not to Report
Male	15	8	1
Female	20	10	0
White	14	10	1
Black	11	3	0
Asian/Latino/ Multiethnic	10	5	0
High school diploma/ Some college	11	4	1
College degree	12	10	0
Some graduate school/ Graduate degree	13	3	0

Differences in Report by Number of PHIs at Intake. Additionally, post-hoc analysis was done to examine differences in number of physical health issues reported at intake between clients who did versus did not report a physical health issue in at least one therapy session (PHQ5). Results of a t-test revealed a significant difference, as clients who reported at least one physical health issue during the course of therapy had a higher number of reported physical health issues at intake, t= 3.54, p=.001.

Differences by Temporal Qualities of the PHI. Following qualitative coding to identify temporal characteristics of the physical health issue discussed (i.e., transient, evolving, chronic), an ANOVA was conducted to examine whether there were significant mean differences in reported distress for transient (M=1.43), evolving (M=1.74) and chronic (M=2.02) (PHQ1b). Results of the ANOVA indicated that there were no significant differences (p=.16). Because the length of time a physical health issue affects a client could have an impact on their attitude about its relationship to their mental health, an ANOVA was also conducted to examine whether there were significant mean

differences in reported attitudes about the relationship between the PHI and mental health for transient (*m*=1.79), evolving (*m*=2.54) and chronic (*m*=2.73). Results of the ANOVA indicated that there were no significant differences (*p*=.09). Finally, an ANOVA was conducted to examine whether there were significant mean differences in reported depth of discussion about the PHI for transient, evolving and chronic issues. Results were significant (F(3)= 3.55, *p*=.02), with evolving issues rated as having more depth of discussion (*M*= 3.23) than chronic (*M*= 3.05) and transient (*M*= 2.38) issues. The effect was medium (η^2= .08).

Table 14

Summary of Post-Hoc Findings

Therapist Perspective	**Client Perspective**
• Clients' presenting problems as described by therapists were most commonly relationships, depression, and anxiety, and only 1 was categorized as physical health.	• PHIs talked about in session were chronic (47.8%), evolving (34.5%), and transient (16.8%) • No priming affect was found in number of PHIs discussed in therapy for clients who were asked about physical health at intake. • There were no age, gender, or education-level differences between clients who reported or did not report a PHI during the study. • Clients who reported at least one PHI during the study had more reported PHIs at intake than those who reported no PHIs during the study. • There were no mean differences in distress level for issues that were chronic, evolving, or transient. • There were no mean differences in attitude about relationship between PHI and mental health for issues that were chronic, evolving, or transient. • Evolving, chronic, and transient issues differed significantly in mean scores of depth of discussion about the PHI, with evolving issues rated as having the most depth of discussion.

Chapter 5: Discussion

This study was the first to examine if and how clients and therapists talk about physical health in open-ended psychotherapy. The findings from this study indicate that while talking about a physical health issue was relatively infrequent, clients have physical health issues that they find distressing. They are more likely to share issues in session that they rate as more distressing and related to their mental health than those they chose not to share. Clients are three times more likely than therapists to initiate discussion about physical health in session. Physical health issues that were discussed usually came up in the early phase of long-term, open-ended treatment, were discussed in more than one session, and were generally likely to affect clients' quality of life. Clients and therapists were highly variable in terms of the number of sessions they reported talking about a physical health issue. In sessions when a physical health issue was discussed, depth of the discussion varied greatly, but when clients' understanding of their physical health issue was evolving or unclear, they more consistently talked about the issue in depth. When talking about physical health, therapists reported helping clients draw connections with their mental health through insight, while clients felt therapists focused more on exploration of the issue.

From the client perspective, qualities of the discussion about a physical health issue in session related to process and outcome, with distress and depth positively related to client-rated working alliance and attitude about the relationship between the PHI and mental health were negatively related to client-rated working alliance. Regression analyses found that who initiated discussion about the physical health issue, depth of discussion about the PHI, and attitude about the relationship between the PHI and mental

health were predictive of post-session scores of Session Evaluation. Regression analyses also showed that depth of discussion about the PHI, and attitude about the relationship between the PHI and mental health were predictive of post-session scores of the Real Relationship. Clients' decision not to talk about a physical health issue was significantly and positively related to both working alliance and session evaluation.

In this chapter, I discuss the findings related to talking about physical health in psychotherapy in more detail including: frequency of a report of a physical health issue in psychotherapy; characteristics of the physical health issues raised; importance of distress, depth and attitude; therapist responses to talking about physical health; process and outcome related to talking about physical health. Limitations of the study, implications for education, training and practice, and future directions for research are also discussed.

Frequency of Report of a Physical Health Issue in Psychotherapy

While 69.7% of clients reported a current physical health condition at intake, 61.1% reported talking about at least one physical health issue with their therapist in a session. The remainder of the clients never reported that they talked about a physical health issue with their therapist. These findings cannot be compared to previous studies about physical health in psychotherapy, as this was the first study to examine this question. All but one therapist (91%) reported talking to at least one client about physical health in treatment, and the one therapist who did not completed the survey only seven times. While calculation of the frequencies of each of these was based on client and therapist self-report, this study assessed these occurrences immediately after every session. Previous studies of psychotherapy phenomena have characterized infrequent occurrence of in-session events, such as a literature review of self-disclosure (Hill &

Knox, 2001) which noted that between 1 and 13% of therapy interventions were self-disclosure and a study about the use of immediacy (Hill et al., 2013) found the intervention was used in about 5% of therapy interventions. Though these factors have been found to be infrequent, they have also been a focus of empirical investigation and psychotherapy training. In terms of client behaviors, a study of client disclosure of secrets found that clients disclosed a secret in 18% of sessions (Marks, 2017).

Clients reported that they talked about a physical health issue in 12% of sessions, and therapists reported it 13% of sessions. On average, therapists reported talking about physical health with clients in 17.1% of all their sessions, while clients reported it in an average of 15.7% of sessions. This suggests that talking about physical health in psychotherapy is not something that happens in most sessions. Still, it occurred in a substantial percentage of sessions, making it a likely topic during long-term, open-ended treatment process. Results indicated that physical health is more salient for some clients than others, with great variability observed. The range of percentage of discussion of PHI in session from the client perspective was 0% to 100%, but these numbers include participants who completed the survey less than 5 times. For clients that completed the survey 5 times or more, the highest percentage of reports of a PHI was 40.0% (n=2) and the lowest was 0% (n=10).

Additionally, there were a small number of sessions (5.9%) in which clients had a physical health issue but chose not to bring it up. Examination of the qualitative data provided by the 13 clients for whom this was the case indicated that clients felt the issue was not relevant or did not fit within the session time or priorities. It is unclear why clients felt talking about physical health was not relevant. In the cases when clients

mentioned a transient illness such as the flu, one could imagine that a hypothetical client might not view the illness as being relevant given the focus of the clinic on relationship issues. It is also possible that clients made an assumption that physical health is not as relevant a topic for psychotherapy as other topics and may not have been as aware of possible mind-body connections. For the clients who indicated that it did not fit with time or priorities, it is possible that clients make decisions about what to bring into session based on level of distress, and that the physical health issue is not as distressing as, say, a pending divorce. However, as many therapists described clients' presenting problems as "depression" or "anxiety," – similar to those found in a study of clients at a college counseling center (Benton et al., 2003) – physical health and mental health concerns may not be mutually exclusive and are often co-occurring (e.g., Bair, Robinson, Katon, & Kroenke, 2003, Kiecolt-Glaser & Newton, 2001).

Characteristics of Reported Physical Health Issues

Timing. The first report of a physical health issue was most likely to occur on or before session 11, indicating that clients tend to talk about their health in the early part of long-term treatment. As therapists and clients in this study typically met once per week, this means that most conversations about physical health usually occurred in the first few months of therapy and were less frequent in later sessions. This may be because early sessions of psychotherapy tend to involve information gathering about a wide range of factors that impact clients' well-being. It could also be that clients were thinking about physical health due to this survey's questions at the end of each session, thought they should talk about it with their therapist, and then did not find the need to talk about it later. Additionally, it is possible that the mean session number corresponding to a report

of a physical health issue was lower because the majority of clients began this survey at intake and, therefore, most cases had the opportunity to report a physical health issue in early sessions. Clients who began participating in this survey toward the end of treatment may have found bringing up any new topic a distraction from end-stage goals and termination.

Interestingly, therapists reported that they discussed physical health with their client in only eight intake sessions. As medical history is a part of the semi-structured interview guide at the clinic used in this study, this finding appears lower than expected. It may be that therapists are using a less structured approach in the intake session than described in the protocol, that they do not have enough time to cover that question in the 50-minute intake session, that they skip over the question, that clients do not report any physical health issue when asked, or that therapist are not recalling physical health information when completing the post-session measures. Indeed, the way the therapist does or does not address physical health in an initial session may set the standard for what the therapist sees as valuable in forming the picture of the clients' distress and the path toward improvement. The finding that clients who reported a greater number of physical health issues at intake were more likely to report a physical health issue again during the course of therapy supports the notion that the intake session can set an important tone for the treatment focus.

Initiation. Importantly, clients and therapists agreed that clients initiated talking about a physical health issue three quarters of the time (73.5% client perspective, 77.5% therapist perspective). This seems to indicate that therapists are more reactive than proactive in talking about physical health in psychotherapy. Because some therapists

were more likely than others to talk about physical health with their clients, perhaps these are therapists that are proactive in asking questions about clients' physical functioning or are more likely to notice something about the client's words or demeanor that suggests the presence of a health issue. Still, clients tended to report that they had talked about a particular physical health issue in more than one session, suggesting that the issues they raised were important and did affect their quality of life. Perhaps therapists initiated talking about physical health only after their clients had raised an issue they found important for follow-up. For context, a study of immediacy (Hill et al., 2014) found that therapists initiated immediacy 85% of the time. In a study of perception of cultural competence in supervision, Ancis & Marshall (2010) found that trainees perceived higher levels of supervisor multicultural competence if supervisors initiated discussions about culture. Applied to this study, this finding may suggest that clients are following therapists' lead and letting them initiate the conversation about physical health. In that sense, perhaps therapists are attempting to remain open and responsive to the needs clients find most salient. Further, therapists at this clinic aren't explicitly trained to address physical health issues, which inherently puts the burden on clients to initiate those discussions.

As clients initiated talking about physical health much more frequently than therapists, it is important to consider clients' related behaviors in medical settings. Street and colleagues (1995) concluded that medical clients who perceive that it is the physician's job to discuss all aspects of quality of life had a greater willingness to discuss psychological issues with doctors. This conclusion seems to be supported by the qualitative results of this study as common reasons given for choosing not to talk about a

physical health issue during a session that the issues were not relevant followed by assertion that there was not enough time to talk about it or it was not a priority. Perhaps clients felt it was not relevant because the therapists' actions seemed to indicate they found it less relevant. It stands to reason that clients prioritize using the time allotted in each session to talk about things that are communicated to be relevant to the therapeutic process. And, data for this study was collected at a clinic which advertises itself as one that "focuses on insight and understanding difficulties in relationship problems, depression, anxiety, grief and loss, meaning in life, dreams, and nightmares." As the qualitative data for this study shows, clients in treatment at the time of this study were working on issues of anxiety, depression, and relationship issues, not with health issues as a primary focus.

No matter the reason, it is important to examine therapist patterns of asking about physical health because of recent changes in psychologists' professional designation. As health service providers, psychologists are being increasingly trained to consider the way mental health care fits into the broader health care system. Several studies have found that individuals with mental illness tend to be in poorer physical health than those with no mental illness (e.g., Jones et al., 2004). Consider the client who has difficulty falling or staying asleep. This client may have been referred for therapy by a general medical provider or may benefit from consulting with a medical provider if sleep does not improve during the course of therapy, as poor sleep or insomnia are associated with various chronic health concerns, such as heart disease, pain disorders, and cognitive conditions (Foley et al., 2004).

Content. Across therapists and clients, the most common types of physical health issues talked about in therapy were sleep/fatigue, pain, weight, and diet/exercise. This subsection will attempt to contextualize these findings, though literature about these specific issues was not extensively covered in the literature review because it was not possible to know what issues would be talked about in therapy due to the exploratory nature of this study. Sleep problems are endemic in the United States, with research indicating that between 31% (Liu et al., 2013) and 35% (Liu et al., 2014) of adults sleep less than the recommended 7 hours per night. Studies have demonstrated that both short and long sleep durations are associated with frequent mental distress (e.g., Liu et al., 2013). Most clients who talked about sleep in this study indicated that they got less sleep than they wanted or needed. For example, one participant wrote, "No sleep often, not a good sleep," and another wrote, "No peaceful sleep." Sleep problems also commonly co-occur with a broad range of mental health conditions and have been found to be associated with anxiety disorders (Mullin et al., 2017) and recurrent depression (Cable et al., 2017). Pain conditions, such as migraines, which was among the top conditions described by clients in this study, have been described in medical literature as highly disruptive to daily living, quality of life, and psychosocial well-being (e.g., Vartiainen et al., 2016) and often co-occur with depression (Bair et al., 2003). Weight and diet and exercise are related on their face, but can also be thought of as distinct depending on the behaviors and biological makeup of each client. According to the National Health and Nutrition Examination Survey, 36.5% of adults in the U.S. were obese during the survey period from 2011-2014 (Ogden, 2015). Obesity is one of the most common physical health issues among those with mental illness, and taking medication for psychological

conditions can add to difficulty with weight management (e.g., Citromea & Vreelandb, 2009). It is noteworthy that some clients consistently described their physical health issue as "weight" while others described it in the behavioral terms "diet and exercise." Therapists might benefit from clarifying if client concerns are physiological or behavioral or both to more effectively tailor treatment to their goals. When we consider this core concern of clients combined with therapist response to client concerns, it appears that there were less action-oriented responses than clients may have wanted. However, this may be because this clinic operated from a psychodynamic-interpersonal framework.

Role of Distress, Depth of Discussion, and Attitude about Relationship between Physical and Mental Health

When clients talked about a physical health issue during a session, they reported on average that they were moderately distressed by the issue. In contrast, physical health issues clients chose not to talk about were typically rated as only slightly distressing. While clients felt that health issues they brought up in therapy were very much related to their mental health, the ones they chose not to talk about were viewed as only slightly related to their mental health. Therapists and clients agreed that the issues brought up in session were very much related to the client's mental health, yet they both rated depth of discussion about these issues as "neutral" or average. It should first be considered that asking clients and therapists about "depth" is a vague characteristic and may mean different things to different people. In a study of depth of in-session exploration (Mallinckrodt, Porter, & Kivlighan, 2005), depth was assessed using the Depth Subscale from the Session Evaluation Questionnaire (Stiles & Snow, 1984), which was thought of as the session's value and power. Because this study did not use this subscale or other

multi-item measures of depth, the variation in rating may be because of different personal definitions of depth. It is notable that therapist and clients agreed on many of these characterizations, making it more likely that these self-report findings are representative of what occurred during session. These findings indicate that at the very least, issues that were distressing and very much viewed as being related to mental health were not always reported as important to the session. It is possible that a psychodynamic-interpersonal training clinic does not emphasize talking about physical health with clients, and therefore therapists talk about it to the degree that clients initiate and sustain its focus. It is also possible that these issues are "transient" or "evolving" as characterized by qualitative coding and therefore lack importance or clarity for depth of discussion. Still, for therapist to feel prepared to discuss any physical health issue in depth, they may feel that they require more specific training.

Post-hoc analyses showed that evolving, chronic, and transient issues differed significantly in mean scores of depth of discussion about the PHI, with evolving issues rated as having the most depth of discussion. This finding highlights the importance of ambiguity in an individual's experience of their physical health. It makes sense that individuals who are about to undergo a medical procedure or test or further evaluation would be uncertain about the outcomes and therefore experience more anxiety. In turn, clients may feel that therapy is a good place to process feelings of anxiety and talk about strategies to cope with the uncertainty.

Therapist Response to Physical Health Issues in Session

Therapists reported that they talked to their clients about the relationship between the physical health issue(s) and their mental health in about 66% of sessions when a PHI

was brought up. The qualitative data sheds further light on this finding, as therapists provided descriptions of their responses to clients' physical health issues that raters of the qualitative data viewed as insight focused. In comparison, clients' perceptions of therapist responses were rated by coders as more explorative and focused on thoughts and feelings. This discrepancy may indicate that therapists in training self-report responses that are viewed as ones that might have more impact on treatment while clients may report more of how they felt talking about a certain topic. It also may indicate that therapists feel that their insights are obvious to clients, while clients may need more attention to those insights to integrate them into their session "takeaways." Correlational data for this study also supports the notion that clients and therapists have different perspectives about therapy sessions (e.g., correlation between therapist and client-rated Real Relationship was .10, see Table 6). Previous research has suggested that therapists and clients perceive process and outcome variables differently. For example, in a study with clients in a university setting with therapist trainees, clients and therapists rated the alliance differently, with clients viewing both therapist and client alliance behaviors as more positively than therapist did (Bachelor, 1991). Another study that examined novice therapist and client judgments about session depth found that clients rated sessions as deeper than therapists did, and further, that therapist and client judgments about session depth were nearly unrelated (Stiles & Snow, 1984). As in the findings of that research, this study raises caution that therapists-in-training be aware that their perspective of what is important in therapy may differ from their clients.

Physical Health, Process and Outcome

Several aspects regarding discussing a physical health issue in session were related to post-session process and outcome measures. Client ratings of depth of discussion about the PHI, distress about the PHI, and attitude about the PHI's relationship to their mental health accounted for unique variance in scores of working alliance. Client-rated depth and attitude also accounted for unique variance in scores of the real relationship. The working alliance and real relationship were both related to scores of depth and attitude, factors that give a general sense about the importance of the issue to the session in the scheme of the client's overall treatment. Finally, several factors influenced scores of session evaluation, including initiation of discussion about the PHI, attitude, and choosing not to talk about a physical health issue. It is possible that if clients talked about their physical health in depth, they felt the therapist understood them in a more complete and genuine way, which could affect their perspective of the real relationship. Similarly, clients may have considered the depth of discussion about the PHI as a signal of what is important to the therapeutic work. This could be considered a negotiation of the tasks and goals of therapy, hallmarks of the working alliance. Further, when clients considered how much they felt the PHI related to their mental health (attitude), they may have experienced the therapist response as validating of this connection and therefore rated working alliance and real relationship higher. However, it is not possible to determine the temporal nature of these relationships. In other words, the possibility must be considered that it is instead those clients with strong relationships and alliances who bring up physical health in psychotherapy, with the notion that the therapist will address it appropriately. In consideration of the surprising finding that

clients' decision not to talk about a PHI was related to higher scores of session quality (SES), it is possible that clients made the decision not to talk about a PHI because there was another topic that was more pressing during the session, and talking about that topic led to increased positive feeling about the session. The qualitative data examining why clients did not talk about a PHI supports this notion, as clients sighted time and priorities as a reason multiple times.

This study found more significant results from the client perspective than from therapist ratings of study measures. This might be because therapists had less variability in responses of outcome measures. Additionally, though the study was exploratory, it might have been expected that therapist ratings of physical health-related items (e.g., attitude about the relationship between the PHI and mental health) were related to session outcome measures (e.g., working alliance). Qualitative data also supported this speculation, as coders rated therapist perspectives of their responses to PHIs as insight-oriented. This would indicate that therapists did find value in talking about physical health, but these interventions may have not been the most salient to them when considering the whole session to rate outcome measures.

Limitations

First, it is difficult to generalize the results of this study to other types of psychotherapy, as data were collected at a doctoral training clinic providing long-term, psychodynamic-interpersonal clinic to adults looking for low-cost therapy in the community. Other therapeutic settings or similar settings with different theoretical orientations may make talking about physical health in psychotherapy more or less salient. Psychodynamic-interpersonal therapy has not traditionally placed an emphasis on

physical health. However, trainees at this clinic were pursuing doctoral degrees in counseling psychology. As counseling psychology is rooted in a holistic, developmental, and strengths-based approach to well-being (Chwalisz & Obasi, 2008), perhaps some trainee therapists considered physical health to be important to consider in each case.

There are a few limitations related to measurement. First, the Physical Health in Psychotherapy measure developed for this study had not been previously piloted or validated, and relied on single items for each variable. As these were not multi-item scales, these items may have been more influenced by personal biases and measurement errors (Hoeppner, Kelly, Urbanoski, & Slaymaker, 2011). On the other hand, therapists and clients seemed to agree on the single-items (e.g., initiation of discussion about PHI, attitude about relationship between PHI and mental health). Second, this study assessed physical health in psychotherapy alongside other existing studies at the same clinic. Therefore, the researcher used the process and outcome measures that were routinely given to all clients and not ones specific to the current study. In other words, measures used in this study were those that have theoretical relevance to psychotherapy in general but not to specific client concerns such as health issues. Future research could examine specific health-related outcomes, such as number of medical visits or physical symptoms (e.g., Pennebaker, 2003). Third, because the items that assessed physical health issues at intake and those discussed during session were open-ended questions, clients had to spend time writing out the response. The qualitative data about the PHIs provided by clients is very short (e.g., one or two words), which indicates that clients were not inclined to spend much time after the session describing the PHI. If clients could choose from a list of physical health issues that were provided by researchers, they may have

indicated more physical health issues across time points. On the other hand, as this was an exploratory study, there was no way to know what issues would have been important to include on that list. The primary aim of the study was to examine the health issues that would come up in therapy, and a list would have limited the accuracy of this sense.

The extent to which participants fully understood the definition of a physical health issue is unclear. The researcher provided a few examples of physical health issues for participants, but the variability in the number and nature of physical health issues reported may indicate that clients used different criteria for determining what constituted a physical health issue. There were several clients who even listed issues commonly thought of as psychological issues as responses to these items (e.g., "bipolar 2," "depression").

Content of physical health issues that clients chose not to discuss were unknown, as asking that clients name these would have undermined the choice not to disclose. Therefore, this study cannot compare the content of issues that were talked about and those that were not talked about to assess further differences between these issues. Future research might attempt to capture these differences by examining which physical health issues were not discussed but were identified by clients' medical records or by self-report at intake.

This study conducted a number of analyses because of its exploratory nature. With the number of analyses, significant findings could be spurious. While variables like distress and depth may relate to variables like the real relationship, working alliance, and session evaluation, they may also not be causally linked and may in fact be linked by a third variable (Vogt & Johnson, 2011). For example, these relationships may be affected

by therapist warmth or another common factor. Additionally, clients and therapists were rating session outcome measures such as the Real Relationship, Working Alliance, and Session Evaluation with the entire session in mind and not just specific to various topics raised during that session.

Finally, this study relied on self-report of therapists and clients and this potential limitation could be addressed by a team of raters observing and coding each session. Because there is videotape available for each of the sessions in this study, raters could code a random sample of sessions to get a more objective sense of the variables measured (e.g., if a physical health issue was discussed, content of physical health issue). This would be particularly important as therapists and clients had relatively few sessions for which they both reported that a physical health issue was discussed in that session.

Implications

This study represents an important contribution, as the field of psychology seeks to educate and train psychologists under the new designation of "Health Service Psychologists." New professional standards outline expectations that psychologists offer treatment that includes treatment for psychological and other health related disorders (APA, 2015). This study contributes to several of the seven issues raised by the Health Service Psychology Education Collaborative (2013), including providing a baseline for evaluating competencies in education and training of health service psychologists (Issue 3), initiating a focus on competency assessment for the delivery of health care services (Issue 4), and examining integration within and across curricula in health care (Issue 5). More, this study's biggest contribution is its pioneering examination of if and how therapists in training talk about physical health with their clients during session, which

clearly adds to the empirical understanding of the preparation and roles of health service psychologists (Issue 7).

Therapists should know that most clients have physical health issues, but talking about them in therapy sessions is relatively infrequent. Some psychotherapy cases may never include a discussion about physical health, while others talk about it more because of its distressing nature. Therapists should be especially aware that clients bring up physical health in psychotherapy three times as often as therapists do, and they may understand that clients experience therapists as not initiating these conversations. Therapists may be aware that physical health comes up more frequently in the early part of treatment, and that clients may bring it up less in later sessions as a result of learning what topics are valued or responded to in therapy.

As psychodynamic-interpersonal therapy can focus on insight and other cognitive-based processes for progress, this study highlights the importance of considering the three-dimensional client. As clients' physical health affects daily activity outside of therapy, it also affects clients' ability to engage in active coping strategies and behavior change. Therapists should be aware of the significance of physical health issues such as sleep problems, as these problems can affect all aspects of functioning. Clients who experience difficulty with their bodies may see their bodies as a barrier to therapeutic goals that are more cognitive and emotional in nature, and may benefit from ongoing or initiated medical treatment to address these issues alongside psychotherapy.

Therapists and training programs might view physical health as a contextual factor that affects all clients. When clients experience normal physical functioning, it may

contribute positively to clients' well-being, while issues in physical health such as sleep or weight lead to difficulties in mood, career, relationships, identity, and more.

This study has implications for general training and preparation of doctoral-level therapists, as results showed that therapists infrequently ask about physical health. Additionally, therapists and clients had varying perspectives of discussions about physical health, and therapists-in-training could benefit from thinking about physical health intervention from a psychotherapy stage model perspective (e.g., exploration, insight, action; Hill, 2014)

Future Directions

More studies are needed that examine physical health in psychotherapy to build a body of psychology literature to understand if and how clients approach physical health in treatment. A first step would be to conduct a study with a larger number of therapists – with more experience – who are from a variety of theoretical orientations, as results from such a study would increase the generalizability of findings. It would also be helpful to study therapeutic exchanges for a congruent and finite period of time among cases to get a better sense of client and therapist differences and whether limited time has an impact on discussion of physical health. As described, persons with depression often report co-occurring physical health issues. As depressed persons often report somatic symptoms such as headaches and sleep disturbance (Katon, Kleinman, & Rosen, 1982), measures that contain these symptoms could be used (e.g., Brief Symptom Inventory (BSI), Hopkins Symptom Checklist (HSCL)).

Additionally, future studies could develop more robust and targeted measures, such as a checklist of health issues and more items to assess distress related to the PHI

and attitude about the relationship between physical and mental health. The Depth Subscale of the Session Evaluation Questionnaire (Stiles & Snow, 1984) could be used as a multi-item measure of depth rather than the single item used in this study. Future studies may also use other measures to assess client outcome, such as measures that specifically examine physical health improvement or overall well-being.

Future studies may also consider client pathology (e.g., DSM diagnoses) in relation to report of physical health concerns. Severity of psychopathology may be linked with the frequency of reporting health issues, and such examination would illuminate important considerations for therapists when assessing and conceptualizing clients with more or less severe pathology.

Like client factors that could add to understanding about report and discussion about physical health, it may be useful to examine therapist factors that contribute. For example, future studies may ask therapists about their familiarity with the relationship of physical symptoms to psychological concerns or the co-occurrence of physical and psychological issues. Research could also examine health status to see if therapists who experience physical health issues talk about physical health more with their clients.

Finally, more attention should be paid to therapist behavior and attitude when viewing the importance of physical health on psychological well-being and when talking about physical health in sessions. Specifically, as mentioned, there is videotape of the sessions included in this study, and a coding team could examine the videos for these therapy behaviors. Focused on preparing and training health service providers, graduate programs and training sites may want to know more about how therapists view physical health issues and how they respond to them. This would allow trainees to identify

resources to increase their knowledge and comfort in talking about physical health, such as knowledge about the healthcare laws and policies in their state or region and knowledge of the American Disabilities Act. Based on the findings of this study, this researcher is considering developing training guidelines for therapists regarding how to assess and explore physical health in therapy as well as its relationship to psychological concerns.

Appendix A: Review of the Literature

Psychological adaptation is important when an individual develops or is diagnosed with a physical health issue such as celiac disease, obesity or cancer or is living with conditions such as chronic pain. Decades of research show that health conditions affect psychological well-being, identity, coping and more as individuals work to restore their sense of well-being (e.g., Hoffman, Lent, & Raque-Bogdan, 2013). This literature review examines if and how individuals use psychotherapy to help cope with physical health issues. Although no studies could be found that directly examine the frequency and characteristics of discussions of physical health in therapy, it can be helpful to look at literature from key areas such as the mind body relationship and disclosure in psychotherapy that may inform this question. For physical health issues to be raised in therapy, both the client and the therapist must view them as important in the therapy process. Therefore, this review will be divided into two sections: 1) the therapist perspective, including attitudes about the mind-body relationship and associated behaviors (e.g., interventions) in psychotherapy and 2) the client perspective, including attitudes about the mind-body relationship and associated behavior (e.g., disclosure) in psychotherapy.

The Therapist Perspective

For centuries, scholars have sought to explain the relationship between the mind and body through philosophical argument, theoretical proposition, and empirical study. Today, some 21st Century scientists and practitioners view the mind and body as distinct entities (dualism) and some as one interrelated system (monism), the notion that the health of the mind and body are connected is well established. Whether two systems or

one unified entity, evidence from psychology and medicine supports that the course of illness is influenced by the interrelationships of biological, psychological, and social factors.

Many credit George Engel (1977) with the conceptualization of this biopsychosocial model, though the framework was suggested first by Guze, Matarazzo, & Saslow in 1953. Guze et al., (1953) had backgrounds in medicine and psychology and were the first to propose that a comprehensive approach to disease requires examination of four factors: environment or life situation, heredity and past experiences, biological changes, and behavioral responses. With specific implications for psychotherapy, the authors suggested that "…[behavioral responses to disease] are largely determined by factors in the individual's heredity and past experience and hence reflect to a considerable degree the individual's social and cultural setting. Furthermore, these subsequent responses are the ways at the disposal of the organism for dealing with its disturbed equilibrium" (p. 129, Guze, et al., 1953).

Engel expanded upon the notion that treatment of disease must consider psychological and social factors, calling directly for change of the traditional biomedical model. Engel asserted that, "…concentration on the biomedical and exclusion of the psychosocial distorts perspectives and even interferes and even interferes with client care" (p. 131, Engel, 1977). Beyond theoretical recommendations, Engel outlined the role of healthcare providers in treating illness and promoting well-being, saying, "…[it is the] function of the physician to establish whether the person soliciting help is "sick" or "well"; and if sick, why sick and in which ways sick; and then to develop a rational program to treat the illness and restore and maintain health" (p. 132, Engel, 1977).

Today, biopsychosocial theory continues to influence psychological policy and practice. Health psychology continues to grow as an area of specialization for psychologists; established in 1978, the Health Psychology division of the American Psychological Association (APA Division 38) ranks in the top 10 in membership among the APA's 54 divisions (Masters et al., 2009). Health psychology has evolved into an area of specialization focused on the application of the connections of behavioral, emotional, cognitive, social and biological factors to prevention and treatment of illness and disease (APA, 2011). Psychology as a whole is embracing a multifaceted definition of health. Today in its education and training guidelines, APA calls for students who are prepared to be health service providers across work settings, saying that there is an increased need to focus on "biological, psychological, social, and cultural aspects of health and behavior regardless of whether one proceeds to practice with traditional mental health populations or in other areas of health" (p. 412, Health Service Psychology Education Collaborative, 2013). Further, the education and training of psychologists "must evolve from a primarily psychosocial focus to a biopsychosocial focus in terms of the substantive knowledge base if psychologists are to provide appropriate health care services, including assessment, screening, psychotherapy, counseling, diagnosis, treatment, prevention, remediation, consultation, and supervision" (p.7, Belar, 2014). In changes to accreditation standards, the APA's Commission on Accreditation adopted new guidelines in February, 2015 that change the standard in accredited psychological education from "professional psychology" to "health service psychology" (APA, 2016). These new guidelines are effective January 1, 2017 and define health service psychology as:

> "…the integration of psychological science and practice in order to facilitate human development and functioning… [including] the generation and provision of knowledge and practices that encompass a wide range of professional activities relevant to health promotion, prevention, consultation, assessment, and treatment for psychological and other health-related disorders. Programs that are accredited to provide training in health service psychology prepare individuals to work in diverse settings with diverse populations. Individuals who engage in health service psychology have been appropriately trained to be eligible for licensure as doctoral level psychologists." (p.3, APA, 2016)

Counseling psychology's dedication to wellness and prevention has long been in line with a holistic view of care and of the person. More recently, counseling psychologists are recognizing the role of disease prevention and health promotion in overall well-being. Nearly 70% of APA-accredited doctoral programs in counseling psychology list health psychology as a faculty research interest on their websites and more than 10 percent offer health psychology coursework or practicum (Nicholas & Stern, 2011). After graduation, students from these programs increasingly practice in areas that require attention to physical well-being including integrated health care and campus wellness centers (CCPTP, 2005). When naming professionals best suited to provide psychological services to disabled veterans returning from World War II with both physical and psychological concerns, the Veterans Administration identified counseling psychologists (Whitely, 1984). In 2005, the numbers of counseling psychology graduates employed in Veterans Administration medical centers had nearly tripled from the decade earlier to 14%, and individuals working in general hospitals had nearly doubled to 9% (CCPTP, 2005).

Research has begun to take a closer look at the way counseling psychology programs integrate health psychology as part of training (e.g., Raque-Bogdan et al.,

2012), and competencies continue to develop as benchmarks for such education (e.g., Fouad et al., 2009). In an investigation of health psychology training within counseling psychology, Raque-Bogdan and colleagues (2012) surveyed training directors about student and faculty involvement in health-related research, practice, and teaching, health-related research topics conducted by students and faculty, and expectations and ability to increase training opportunities related to health. Results of the 22 training director respondents, 3 (13.6%) named health as a subspecialty area of their program. When asked if the program had a specific focus related to health psychology, 9 programs (41%) said that they had a minor, concentration, track, or other form of training that prepared students in health psychology. Two of the 22 programs reported some kind of training required for all students through education program or practica. Thirteen programs reported having no health-psychology focus through a minor, concentration, or track, but 10 of these programs said that students had opportunities to seek this training on an individual basis. When program directors who reported no health-psychology focus were asked about the feasibility of adding health psychology training to their program, only one respondent (8%) said it would be impossible, 3 (23%) said it would be difficult, 7 said it would be possible with some difficulty, and 2 (15%) said it would be fairly easy. The majority of training directors (73%) reported that their students were somewhat interested in health psychology and that an average of about 16% of students pursued a research or clinical position related to health psychology over the past 5 years. Of the 16 programs that reported students were somewhat interested in health psychology, 12 faculty members of the combined 91 possible faculty members had expertise in health psychology. Despite lower levels of stated health expertise in faculty research, half of

programs indicated that students and faculty conduct research on stress and coping and almost 50% reported research in prevention/health promotion, body image and health disparities.

While this study provides evidence of the increasing belief that health psychology is an important focus for training, research, and practice, this study was limited to the perception of program training directors. It remains unclear how these attitudes may affect individual students and other faculty beyond awareness of opportunities to learn about health psychology. No study to date has investigated the way that a biopsychosocial focus has been embraced among therapists in training or among practicing therapists at large. Further, no study has examined the way these attitudes translate to the therapy room by looking at the frequency, characteristics and correlates of discussions of physical well-being in psychotherapy.

Additionally, psychologists have not yet come to consensus on key issues related to the mind body relationship. Psychology as a profession is grappling with differences in their view of the mind and body as distinct entities or an interrelated whole (Leitan & Murray, 2014) while seeking to embrace holistic care of clients but not cross ethical boundaries of care (Altmaier, 1991). However, the APA is clear that the call for a basic familiarity with disciplines of anatomy, physiology, genetics, pharmacology, anthropology, sociology, and economics does not aim "…to train mini physicians." (p. 423, Health Service Psychology Education Collaborative, 2013) Instead, psychologists should "appropriately assess and treat problems in their areas of expertise as well as ensure whole person care in collaboration with other health professions, including when to refer" (p. 423, Health Service Psychology Education Collaborative, 2013).

Interventions such as relaxation and mindfulness that target bodily awareness and emotional regulation are being used more frequently by psychologists (Baer, 2003; Brown, Marquis, & Guiffrida, 2013; Grossman et al., 2004). Yet it remains unclear the degree to which psychotherapists embrace the mind-body connection in their practice in terms of how they conceptualize client concerns and intervene. While psychotherapists employ interventions such as mindfulness in treatment, the goal is often anxiety reduction rather than on aspects of body awareness such as pain. Further, while psychologists value relaxation and mindfulness interventions and even view them as part of competent practice, it is unknown how often they actually implement the practice of such interventions in their clinical work. One study examined belief-practice disparities of mind-body therapies such as mindfulness among professional psychologists and concluded that the practice of such techniques is significantly lower than the expressed beliefs in the value of these techniques (Schwartz, unpublished dissertation, 2008). Specifically, among the 96 doctoral-level private practice psychologists surveyed, 83% indicated they had personally used relaxation techniques in the past 12 months and 69% indicated they had personally used mindfulness in the past 12 months. However, researchers concluded that practitioners infrequently used mind-body interventions after analyzing data from a 21-item scale developed for the study to measure mind-body techniques. Taken together, these findings suggest that beliefs about interventions focused on the mind and body are valued by professional psychologists but are not as frequently employed with clients and are often not employed to relieve physical strain. To date, no study has examined the psychologists' behavior and attitudes about physical well-being in therapy through examination of actual therapy sessions.

People come to psychotherapy seeking help for a wide range of challenges in their lives. Among the problems most commonly presented at the beginning of therapy are relational strain, anxiety, and depression (Benton et al., 2003). While these problems are widely viewed as psychological, research increasingly demonstrates that these concerns are related to the well-being of both mind and body.

A closer look at the most common presenting problems in psychotherapy illustrates the significance of the mind-body relationship. Research examining the impact of relational discord indicates that those battling interpersonal issues may also experience a decline in physical functioning. For example the quality of a marriage has been demonstrated to be related to physical health, through indirect pathways such as associated depression's impact on health habits and direct pathways such as a decline in cardiovascular, immune, and other physiological mechanisms (Kiecolt-Glaser & Newton, 2001). Anxiety and depression are among the most commonly occurring psychological challenges presented in therapy and among those with physical health issues. Distressing physical, or somatic, symptoms are three times more likely for those with depression and anxiety (e.g., Kroenke, 2003). Further, a study of more than 5,000 primary care clients from clinics around the world found that at least 70% of clients with depression or anxiety complained of physical symptoms rather than psychological symptoms, but described having these symptoms and concerns when asked about them (Simon et al., 1999).

Anxiety has been linked to countless physical concerns, as feelings of intense fear and distress can be accompanied by physiological symptoms that ultimately affect normal physical functioning (e.g., Baxter et al., 2014). Bair and colleagues concluded after a

review of medical literature that of those with depression, 65% also reported physical pain, including chronic, back, facial, pelvic, somatic and axial pain. Medical research has further indicated that psychological factors influence medical conditions as much as the underlying medical disorder (Katon, Lin, & Kroenke, 2007; Kroenke, Sharpe, & Sykes, 2007). Specifically, Katon, Lin and Kroenke examined 31 medical studies involving clients with chronic medical illness (diabetes, pulmonary disease, heart disease, and arthritis) and comorbid depression and anxiety, concluding that when compared with clients with only medical illness, clients with these comorbid conditions reported significantly more medical symptoms across studies. Though no effect sizes were reported in the review, the study's authors were able to conclude that reporting of physical symptoms was higher for those with depression and anxiety even when controlling for severity of medical condition.

As evidence mounts suggesting that well-being involves the health of both mind and body, research also suggests that psychotherapy can produce positive effects for physical as well as psychological health (e.g., Abbass, Kisely, & Kroenke, 2009; Andersen, 1992; Mumford, Schlesinger, & Glass, 1981). For example, research indicates that short-term psychodynamic psychotherapy has helped clients to reduce somatic symptoms (Abbass, Kisely, & Kroenke, 2009). In a meta-analytic review of 14 randomized controlled trials using short term psychodynamic psychotherapy with those with physical symptoms, researchers concluded that psychotherapy significantly reduced physical and psychological symptoms, improved treatment compliance, reduced healthcare utilization, and increased social and occupational functioning (Abbass, Kisely, & Kroenke, 2009). There are several limitations of these findings, including the small

number of studies included, the variable methodology of these studies, the lack of uniform follow-up measures to determine the length of positive effects from therapy, and reliance on client self-report for outcome data. Finally, reviews of existing literature do not address the fact that many studies are unclear about the target of the psychological treatments. In other words, results of this and other studies are not clear about whether psychological treatment reduces symptoms through addressing the psychological aspects or the physical concerns as well.

Still, counseling psychologists emphasize development of coping skills to help manage a variety of conditions. Psychologists can help clients to manage their health-related thoughts, feelings, and behaviors to maintain employment, adhere to prescribed medical treatment, and make lifestyle changes (e.g., physical activity, smoking cessation). Psychologists' interventions are therefore important in improvement of physical health outcomes (Chwalisz & Obasi, 2008).

As medical advances in the United States allow those with chronic illness to live longer, psychologists will increasingly work with clients with physical health challenges that affect their quality of life. Though no study has yet examined what physical health issues are commonly talked about in psychotherapy, it stands to reason that common physical health issues talked about in psychotherapy could include weight, as about one-third of U.S. adults is obese (Ogden et al., 2015), arthritis, which affects about 54 million Americans and is the leading cause of disability (CDC, 2009), and lack of sleep, which affects an estimated 70 million people in the U.S. (Altevogt & Colten, 2006).

Rehabilitation psychologists provide models for interventions that help clients to adjust to living with chronic disease and disability. In outlining the principles that

facilitate health-related adjustment, Garske & Turpin (1998) describe a biopsychosocial approach that considers the current coping behaviors alongside a variety of internal and external factors, including personality and social context. As counseling psychologists share similar values and beliefs, it seems natural to integrate lessons from successful rehabilitation psychology intervention to promote well-being in those with physical health issues.

The Client Perspective

While behavior change sought in psychotherapy often involves physical concerns, such as exercise and eating, it remains unclear the degree to which the typical person entering psychotherapy perceives this as a venue for exploring and addressing concerns related to their physical well-being or physical correlates, consequences, and causes of psychological or emotional distress. Overall, there is a need to explore the attitudes of clients in psychotherapy to explore whether people seek psychotherapy to help with adjustment to a physical concern and whether they disclose concerns of physical well-being in therapy. This study is a first step to answering these questions, and specifically aims to examine disclosure of physical concerns in therapy from both client and therapist perspectives.

While this study aims to begin exploration of client and therapist attitudes and behaviors related to physical well-being in psychotherapy, medical literature has explored client attitudes and behavior (e.g., disclosure), including attitudes about and disclosure of psychological concerns. Investigations of health attitudes and beliefs among clients have suggested that individuals with psychological and physical problems vary in their attribution of these problems (Frostholm, Ornbol, & Fink, 2015). Among clients

presenting with a range of physical diseases, 86% felt that their condition was purely physical, while 58% of clients with a somatoform disorder and 24% of clients with depression and/or anxiety felt the problem was only related to their physical well-being. The authors investigated the prevalence of the belief that problems were both physical and psychological. Among those with what the study described as a well-defined disease, only 12% of clients felt the problem was both physical and psychological. In contrast, about 73% of clients presenting depression and anxiety felt that the problem was both physical and psychological.

Whether the root of the problem is physical or psychological, research has demonstrated that health concerns are not always disclosed and that medical personnel may not explore psychosocial sequalae (Puts et al., 2012). A meta-analysis of unmet needs among adults undergoing cancer treatment concluded that the most common unmet needs described by these clients were psychological (Puts et al., 2012). Specifically, analyses of 30 cross-sectional studies showed that nearly all of these studies identified unmet psychological needs, which were typically about fear of cancer spreading and cancer returning. While it is clear that these are psychological issues for which cancer clients could use support, it is noteworthy that the researchers' findings did not identify the need of these clients to psychologically adapt to different levels of physical, emotional, and social functioning.

To be sure, the experience of illness and disease falls on a continuum of psychological impact. Still, physical concerns and effects from medical treatment of these illnesses often lead to a clear and inevitable need for psychological adjustment. Though it can be difficult to determine the extent to which individuals attribute a symptom such as

pain or chronic fatigue to a psychological or to a physical concern, it is important to consider the type of treatment individuals seek to treat these symptoms. National statistics indicate that more individuals with depression seek medical treatment on a regular basis than they do psychological treatment (Wang et al., 2005). Specifically, in a study of adults with depression lasting a year or more who sought treatment of some kind, 23% were treated by a general medical provider, whereas 16% were treated by a non-medical mental health specialist such as a psychologist (Wang et al., 2005). It is important to note that medical providers can prescribe medication to treat the symptoms expressed by the client so that individuals may be able to address physical and psychological concerns in medical settings. Still, general medical providers who prescribe medications for depression and anxiety may not be likely to address the psychosocial contributors or consequences of these underlying conditions.

Because more and more people are living with chronic health conditions, but these individuals may not view psychological treatment as a place to bring these concerns, it is important to consider how frequently clients who have a health condition that disrupts their functioning and quality of life report this in therapy. Several factors from the medical literature may be relevant to disclosure of physical health issues in psychotherapy.

Attitudes about the relationship between physical and mental health can drive behaviors of doctors and psychotherapists. In a seminal paper that aimed to spark debate in the medical field, Maguire (1985) argued that, when working with individuals who are dying, physicians and nurses assume that clients will disclose emotional concerns and so medical professionals often use distancing techniques to avoid client emotion and to

protect their own emotional reactions to the dying process. Citing direct observation of video and audiotaped medical encounters, Maguire described techniques medical professionals appeared to use to avoid the emotional suffering of their clients, including false reassurance and selective attention. Here, false reassurance was described as an eagerness to comfort the dying through making "more positive statements than are warranted by the circumstances" (p. 1711, Maguire, 1985). Selective attention was described as following-up only on physical difficulties when both psychological and physical problems are present. This paper led to further research about emotional disclosure of clients and in medical literature.

Medical literature points to evidence that clients frequently conceal or fail to disclose health concerns when communicating with physicians (e.g., Maguire, 1985) and further describes that psychological concerns are among those concealed in medical settings (Heaven & Maguire, 1996). In a study of 33 hospice nurses who received feedback and training to increase their client communication skills, researchers used video recordings to identify and code concerns voiced with hospice staff in a sample of 87 hospice clients suffering from cancer. Clients reported that they shared an average of only three out of seven their concerns with hospice staff (Heaven & Maguire, 1996). Further, recorded interactions between nurses and clients that were coded by researchers, showed a total of 262 voiced concerns. Of that number, only 42% of these concerns were identified or noted by hospice nurses, and training did not increase the nurses' ability to identify these client concerns. Of the 262 concerns expressed by clients, 21 of these were labeled emotional worries, suggesting that about 10% of concerns expressed by these dying clients were of a psychological nature. Of note, nurses only recognized these

emotional concerns 33% of the time, although feedback and training did increase recognition of this type of concern.

Client disclosure of health concerns can also be influenced by a client's attitude toward their condition. A literature review by Ryan and colleagues (2005) explored this through an investigation of barriers to disclosure of psychological concerns among cancer clients, concluding that clients may perceive that their fears and concerns are unreasonable or silly. Ryan and colleagues suggested that these attitudes limit disclosure and point to problems with reliance on client communication of psychological distress. Ryan and colleagues further identified the importance of client attitudes about their health care provider, explaining that clients may perceive doctors as too busy to be burdened with information or not able to help with the problem which leads to lack of disclosure.

Another study offered a different perspective on the connection between disclosure and client perception of the clinician's role. In an investigation of perceptions of physician responsibilities and clients' willingness to discuss various topics with the physician, 254 clients were surveyed prior to and following their consultation with a physician (Street et al., 1995). Results indicated that when clients perceived that it was the doctor's job to talk about all aspects of health-related quality of life they expressed greater willingness to discuss these issues with their doctor. Further, clients reported that they were more likely to discuss these issues when they had a longer relationship with the doctor. This study may have implications for whether clients bring health-related issues to psychotherapy, in that they may be more willing to do so if they believe that it is the role of the therapist to discuss health and well as emotional well-being. Taken together, this evidence raises questions about similar phenomena in psychotherapy, such that it is

important to examine whether physical concerns are among those disclosed or concealed in psychotherapy settings and whether they perceive that therapy is a place to discuss these concerns.

Psychological literature has not yet directly explored the frequency or characteristics of disclosure about physical health issues in psychotherapy. However, research suggests that body-related issues are among the least disclosed. Farber and Hall (2002) examined what is and is not discussed in psychotherapy using the 80-item Disclosure to Therapist Inventory (revised) among 147 adults currently in long-term psychotherapy. Clients reported to what degree certain concerns were discussed in psychotherapy on a five point Likert-type scale (1 = not discussed, 5 = discussed thoroughly). Mean disclosure scores were calculated for the nine factors of the disclosure scale, and ranged from 2.62 (sexuality) to 3.81 (intimacy). The three least discussed factors (sexuality, procreation, and body-related issues) all related to the physical experience in some way. Researchers also investigated the connection between disclosure and the working alliance. The correlation between disclosure and working alliance (measured with the WAI) was .28, $p < .005$, indicating that disclosure was higher when the working alliance was higher. This disclosure measure does not include a focus on physical concerns among the 80 items, but rather includes items that are historically thought of as psychological concerns that involve the body (e.g., body image). Therefore, it is difficult to conclude the degree to which researchers would have observed disclosure of physical concerns per se.

Even among those with overt physical concerns, such as veterans returning from war, physical concerns are not often presented as important in psychological adjustment

despite reported symptoms that have direct health consequences (e.g., sleep; Rosen, Adler, & Tiet, 2013). In a study of 1,028 military veterans seeking psychological treatment for posttraumatic stress disorder, 48% of participants had a service-related physical disability, yet in out-patient and residential cohorts, only 6% and 3%, respectively, identified addressing their physical problems as a goal for therapy (Rosen, Adler, & Tiet, 2013). Still, results showed that among the veterans, more than 85% reported at least one PTSD-symptom as a problem including some that are directly related to health or that have health consequences. Of these reported problems, sleep problems were among the most frequently reported and there is a vast literature on the health consequences of sleep disorders. Because this study examined client reported problems and treatment goals, it is limited to the problems that clients, and not therapists, reported. Still, this study sheds light on client perception of symptoms and how those relate to stated goals. Clients may create therapy goals that help them psychologically adapt to obvious physical health challenges, but clients may also present physical symptoms that – regardless or physical or psychological origin – signify the need for examination and adjustment.

Further, disclosure of physical concerns may differ depending on affective and personality factors of clients. While we have established that negative affective states, such as anxiety and depression are linked with negative indicators of physical health (Krantz & Glass, 1984), research has also shown that individuals with higher levels of negative affect report more physiological symptoms than those with lower levels of negative affect (Jorgensen & Richards, 1989). One study examined self-report of physical symptoms in 114 undergraduate students using a self-report symptom inventory and

concluded that individuals with higher negative affect, especially trait anxiety, reported more physical symptoms (Jorgensen & Richards, 1989). These researchers suggested that trait anxiety is a mediator between negative affect and physical symptoms. Costa and McCrae (1987) found a similar pattern of symptom reporting among those with higher levels of neuroticism. In a study examining data from 347 adult women in the Baltimore Longitudinal Study of Aging, researchers found a relationship between the negative emotions (i.e., anxiety, anger, and depression) in neuroticism and frequency of physical symptoms. Specifically, the study examined the total number of physical complaints and found that symptom reporting was correlated with neuroticism, suggesting that those who higher in neuroticism report more physiological symptoms than those with lower levels of neuroticism and its associated negative emotions. The studies described above are limited in their application to the current study, however, as they relied on studies with undergraduate students and in medical settings.

In addition to factors of personality, it is important to consider the role of culture that affect help-seeking and disclosure. Psychological literature examining help-seeking attitudes and behaviors of college students demonstrates that culture can affect the type of help sought and symptoms reported when an individual encounters a problem. Specifically, several studies indicate that individuals who identify as Asian American tend to somaticize psychological problems, reporting physical rather than psychological symptoms and seeking help from medical professionals rather than mental health professionals (e.g., Brown, Stein, Huang, & Harris, 1973; Hyun, Quinn, Madon, & Lustig, 2007; Sue & Morishima, 1982). While the above psychological factors inform this study's aims to understand disclosure of physical concerns in psychotherapy, the

above studies were conducted in medical settings or with undergraduates as participants, and no study to date could be found that examined voluntary disclosure of health issues in therapy. Still, examination of two factors related to disclosure in general psychological literature may be helpful to understand influences of client disclosure of physical concerns: distress and desire for intimacy.

Research indicates that there is a relationship between client levels of distress and disclosure in psychotherapy Stiles theorized a "fever model" of self-disclosure, likening distress and disclosure to a physical infection and a fever as both disclosure and a fever are part of a return to normal functioning (Stiles, 1987). Stiles examined questions about individuals' need to talk about their distress in a study that tested the fever model of disclosure, Stiles, Shuster, and Harrigan (1992) looked at disclosure patterns and scores of trait anxiety among undergraduate students. Researchers concluded that students with higher scores of trait anxiety used more disclosure when presenting an event about which they were anxious than when presenting an event about which they were happy. This effect strong but less among students with moderate trait anxiety and was not present in students with low trait anxiety. Taken together, these results suggest a topic by anxiety interaction $F(2,60) = 3.28, p < .05$. Across students, there was a main effect of topic on disclosure percentage $F(l, 60) = 8.96, p < .01, r = .36$. The results from this study seem to support the premise of the fever model that higher levels of psychological distress leads to greater disclosure.

Another study indirectly supported the notion that levels of disclosure are influenced by negative psychological states. Self-reports of depression and therapist perceptions of client functioning were collected in a sample of male college students in

three sessions of psychotherapy to test correlations with levels of disclosure (McDaniel, Stiles, & McGaughey, 1981). Results indicated that those who were more distressed used more disclosures. However, higher levels of disclosures did not significantly affect therapy outcomes in this study.

The notion that distress is related to disclosure is also supported in the theory of disclosure decision-making. In a proposed disclosure decision-making model, Omarzu (2000) suggested that the goal of the disclosure must be a need or goals such as approval, intimacy, relief, identity, or control. It may be that in the case of disclosure of concerns regarding physical well-being, individuals who need more relief are more likely consider disclosure.

As noted by Omarzu (2000) in the model of disclosure decision-making, intimacy is a second important factor to consider related to revelations about physical health in psychotherapy. Research demonstrates that those who desire intimacy, or a deep, shared understanding of their personal experience, are also more likely to consider disclosure (Omarzu, 2000). From the perspective that disclosure is a kind of social exchange, research indicates that intimacy increases the value of such an exchange. For example, Worthy, Gary and Kahn (1969) examined the characteristics of disclosure using social exchange theory. Analyzing results from a sample of 48 female undergraduate students who completed self-disclosure questionnaires, the researchers concluded that there was a kind of reciprocity with disclosure, such that more disclosures were made with those who were better liked, and that individuals who made more intimate disclosures were liked more.

Collins and Miller sought to clarify and examine the body of literature about self-disclosure and liking through a meta-analysis (1994). The analysis concluded that there are three significant findings related to disclosure and liking. First, meta-analyses indicated a convergence of evidence that those who engage in intimate disclosures tend to be liked more than those who disclose at lower levels. Second, individuals disclose more to those whom they initially like. Finally, people's liking for another is influenced by their disclosure to them. These studies about positive relational factors and disclosure have implications for studying relational factors of therapy process and form the rationale for inclusion of measure of the real relationship.

While positive relational factors influence disclosures, on the other hand, those who desire intimacy with another may also consider interpersonal risk related to disclosure. For example, in communication theory of self-disclosure, literature reveals that several risk factors are often considered, including the tension to reveal and withhold information (Baxter & Montgomery, 1996) and the relational costs or risks of disclosure (Cline, 1989). Another such risk is privacy boundaries (Petronio & Martin, 1986). Among a sample of 252 men and women, Petronio and Martin (1986) examined perceived consequences of disclosure on four topic areas and concluded that for the area of sexuality, more negative consequences were expected. Researchers concluded that higher perceived consequences related to boundaries of privacy among participants. These factors form an important lens for consideration of this study's questions and its findings, as individuals may derive both positive and negative experiences from disclosure.

Conclusion.

No studies could be identified that directly address disclosure of physical concerns in psychotherapy from the therapist or client perspective. The review outlined several key factors that contribute to the current study from medical and psychological literature. From the therapist perspective, these factors include an evolution toward integration of physical and biological factors in psychological education, training, and practice, evidence of the relationship between mind and body, and physical intervention in psychotherapy. From the client perspective, literature points to the importance of links between physical concerns and attitudes that influence disclosure of concerns, attitudes about medical providers, and the influence of distress and intimacy in disclosure. The current study aims to contribute to the psychological literature by examining questions not yet addressed in research. Specifically, this study aims to investigate the frequency and characteristics of client disclosure of physical concerns in psychotherapy, describing the frequency of client disclosure of physical concerns, characteristics of therapist response to those concerns, changes to therapist and client perceptions of one another that result from disclosures, and ultimately, to describe how the behaviors of disclosure affect scores of the real relationship, working alliance, session outcome, and progress in therapy.

Appendix B: Client Consent Form *(Sample, with clinic measures to be confirmed)

Project Title	*Maryland Psychotherapy Research Project*
Why is this research being done?	*This is a research project being conducted by Dr. Clara E. Hill and Dr. Charles J. Gelso at the University of Maryland, College Park. We are inviting you to participate in this research project because you are seeking psychotherapy for interpersonal concerns. The purpose of this research project is to investigate different therapeutic interventions so that we can enhance psychotherapy for clients with interpersonal problems.*
What will I be asked to do?	*The procedures involve screening and an intake interview to determine eligibility to participate. For this you will complete several measures (the OQ-45 with items such as "I feel blue;" the IIP with items such as "It is hard for me to say "no" to other people;" the ECRS with items such as "I try to avoid getting too close to my partner;" the Self Concealment scale with items such as "There are lots of things about me that I keep to myself;" the Attitudes toward Dreams scale (with items such as "I value my dreams."), the Meaning in Life Questionnaire (with items such as, "I understand my life's meaning"). And a demographic form. If selected for the study, you will participate in psychotherapy at a low fee, with the duration and fee to be determined in conjunction with your therapist. You may be asked to bring in a dream to discuss with your therapist during the 3rd or 4th session.* *Sessions will be 45-50 minutes and will be videotaped (tapes will be watched by supervisors). After each session, you'll complete some measures about how the session was for you with items such as "I was able to be myself with the therapist." After the 3rd session, you'll be asked to complete an additional measure (the CAT) about the therapy relationship with items such as "My counselor is sensitive to my needs." After every 8 sessions, you will again complete the OQ-45, IIP, and MLQ.* *One week after therapy ends, you will be asked to come back to the Clinic and complete the CAT , IIP, and MLQ. You will also be asked to participate in an interview (with questions such as "Overall, how did you feel about your therapy experience?") with a researcher other than your therapist) about your experiences in the therapy. You will also be asked your consent for releasing data. Four months after completion of therapy, we will send the measures again to you via mail or email and ask you to complete them.* *All events (other than the mail/email follow-up) will take place in the Maryland Psychotherapy Clinic and Research Lab in the Biology-Psychology Building, in Room 2140 or 2150.*

What about confidentiality?	*We will do our best to keep your personal information confidential. To help protect your confidentiality, you will be assigned a code number and your name will not appear on any of the forms; we will never be able to link your name with your data. We will use an identification key to link your data to your identity; only the primary researchers will have access to the identification key. All data will be kept in locked storage facilities. Only personnel authorized by the project director will have access to questionnaires, tapes, or any other data. All computer files will be password protected. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. The ethical guidelines proposed by the American Psychological Association will be followed in handling all the data. In accordance with legal requirements and professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse or neglect or potential harm to you or others.*
What are the risks of this research?	*There may be some risks from participating in this research study. You could be asked in therapy to think about things that are embarrassing or uncomfortable, and you could become aware of things of which you had previously been unaware. There is also some risk of deterioration or getting worse—estimates are about 5% for psychotherapy.*
What are the benefits of this research?	*This research is not designed to help you personally, but hopefully, the results may help the investigators learn more about the process and outcome of psychotherapy. We hope that, in the future, other people might benefit from this study through improved understanding of the therapeutic relationship. The possible benefits to you of the therapy itself include greater self-understanding and improved interpersonal relationships.*
Do I have to be in this research? **May I stop participating at any time?**	*Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. If the supervisors monitoring the case determine that the sessions are harming you in any way, they may terminate the therapy without regard to your consent. In such a case, we will endeavor to help you find other mental health treatment.*
Is any medical treatment available if I am injured?	*The University of Maryland does not provide any medical, hospitalization or other insurance for participants in this research study, nor will the University of Maryland provide any medical treatment or compensation for any injury sustained as a result of participation in this research study, except as required by law.*

<table>
<tr><td>What if I have questions?</td><td colspan="3">This research is being conducted by Dr. Clara E. Hill and Dr. Charles J. Gelso, Department of Psychology at the University of Maryland, College Park. If you have any questions about the research study itself, please contact Dr. Clara Hill at the Department of Psychology, University of Maryland, College Park, MD 20742, cehill@umd.edu
If you have questions about your rights as a research subject or wish to report a research-related injury, please contact:
Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742;
(e-mail) irb@umd.edu; (telephone) 301-405-0678
This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.</td></tr>
<tr><td>Statement of Age of Subject and Consent [Please note: Parental consent always needed for minors.]</td><td colspan="3">Your signature indicates that:
you are at least 18 years of age;
the research has been explained to you;
your questions have been fully answered; and
you freely and voluntarily choose to participate in this research project.</td></tr>
<tr><td rowspan="3">Signature and Date
[Please add name, signature, and date lines to the final page of your consent form]</td><td colspan="2">NAME OF SUBJECT</td><td></td></tr>
<tr><td colspan="2">SIGNATURE OF SUBJECT</td><td></td></tr>
<tr><td>DATE</td><td></td><td></td></tr>
</table>

Appendix C: Therapist Consent Form *(Sample – with clinic measures to be confirmed)

Project Title	*Maryland Psychotherapy Research Project*
Why is this research being done?	*This is a research project being conducted by Dr. Clara E. Hill and Dr. Charles J. Gelso at the University of Maryland, College Park. We are inviting you to participate in this research project to provide professional services as either a therapist or supervisor for clients seeking psychotherapy for interpersonal concerns. The purpose of this research project is to investigate different therapeutic interventions so that we can enhance psychotherapy for clients with interpersonal problems.*
What will I be asked to do?	*At the beginning of the year, you will be asked to complete the ECRS (items such as "I try to avoid getting too close to my partner"), the TOI (with items such as "I identify myself as Psychoanalytic or Psychodynamic in orientation"), the Self Concealment scale (with items such as "There are lots of things about me that I keep to myself"), the Attitudes toward Dreams scale (with items such as "I value my dreams"), the Meaning in Life Questionnaire (with items such as, "I understand my life's meaning"), and a demographic form. With every odd-numbered client, you will ask them to bring in a dream, if they wish, early in the therapy. No mention of dreams will be made with the even-numbered clients unless they bring them up. After each session, you will complete some measures of the quality of the session (with items such as "I was able to be myself with the client"). You will also be asked each session about whether and how you worked with dreams with your client, and if you answer "yes" you will be asked whether this was part of the manipulation, where it occurred in the session, how long it was, and to rate your adherence to the Hill model (e.g., "How completely did you do the exploration stage?"). You will be expected to meet weekly with your individual supervisor (and complete brief measures after each session with items such as "I was able to be myself with the supervisor") and meet bi-weekly with your group supervisor. After the completion of each therapy case, you will be interviewed about your experiences with the case (with questions such as, "Overall, how did you feel about the therapy experience with [client]?"). All of the therapy will be conducted in the MPCRL in the Biology-Psychology Building, in or near Room 2140. Supervision will take place in the supervisors' office.*
What about confidentiality?	*We will do our best to keep your personal information confidential. To help protect your confidentiality, you will be assigned a code number and your name will not appear on any of*

	the forms; we will never be able to link your name with your data. We will use an identification key to link your data to your identity; only primary researcher will have access to the identification key. All data will be kept in locked storage facilities. Only personnel authorized by the project director will have access to questionnaires, tapes, or any other data. All computer files will be password protected. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. The ethical guidelines proposed by the American Psychological Association will be followed in handling all the data. In accordance with legal requirements and professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse or neglect or potential harm to you or others.
What are the risks of this research?	*There may be some risks from participating in this research study. You could be learn something about yourself that is embarrassing or uncomfortable, and you could become aware of things of which you had previously been unaware. In addition, therapists should be aware that your performance in this project will be factored into your student evaluation.*
What are the benefits of this research?	*This research is not designed to help you personally, but hopefully, the results may help the investigator learn more about the process and outcome of psychotherapy. We hope that, in the future, other people might benefit from this study through improved understanding of the therapeutic relationship. The possible benefits to therapists are learning additional skills to become better at conducting therapy.*
Do I have to be in this research? **May I stop participating at any time?**	*Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. If the supervisors monitoring the case or the project directors determine that you are harming the clients in any way, you may be asked to terminate your participation in this project. In such a case, we will consult with the faculty in the graduate program.*
Is any medical treatment available if I am injured?	*The University of Maryland does not provide any medical, hospitalization or other insurance for participants in this research study, nor will the University of Maryland provide any medical treatment or compensation for any injury sustained as a result of participation in this research study, except as required by law.*

<table>
<tr><td>What if I have questions?</td><td colspan="3">This research is being conducted by Dr. Clara E. Hill and Dr. Charles J. Gelso, Department of Psychology at the University of Maryland, College Park. If you have any questions about the research study itself, please contact Dr. Clara Hill at the Department of Psychology, University of Maryland, College Park, MD 20742, cehill@umd.edu
If you have questions about your rights as a research subject or wish to report a research-related injury, please contact:
Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742;
(e-mail) irb@umd.edu; (telephone) 301-405-0678
This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.</td></tr>
<tr><td>Statement of Age of Subject and Consent [Please note: Parental consent always needed for minors.]</td><td colspan="3">Your signature indicates that:
you are at least 18 years of age;,
the research has been explained to you;
your questions have been fully answered; and
you freely and voluntarily choose to participate in this research project.</td></tr>
<tr><td rowspan="3">Signature and Date [Please add name, signature, and date lines to the final page of your consent form]</td><td>NAME OF SUBJECT</td><td colspan="2"></td></tr>
<tr><td>SIGNATURE OF SUBJECT</td><td colspan="2"></td></tr>
<tr><td>DATE</td><td></td><td></td></tr>
</table>

Appendix D: Client Demographics Form

1. Date: _____
2. Age: _____
3. Sex: □ Male □ Female □Transgender Female to Male □ Transgender Male to Female □ Gender Non-conforming
4. Race/Ethnicity: (check as many as apply):

□ White American
□ African American
□ Asian American/Pacific Islander
□ Hispanic American
□ Native American/Alaskan Native
□ Middle Eastern
□ Multiethnic (please specify: _____)
□ International (please specify: _____)
□ Other (please specify: _____)

5. Highest educational degree achieved: □ High School □ Bachelor's □ Master's □ Doctorate
6. Year at university (if applicable): □ FRSH □ SOPH □ JUNR □ SENR □ GRAD □ NOT STUDENT
7. Major or field of study at university (if applicable): _____
8. Current job (if none, write "none"): _____

Are you currently in counseling or psychotherapy? □ YES □ NO

Have you ever consulted a psychologist, therapist, social worker, counselor, or psychiatrist for any problem? (Check one): □ YES □ NO

Appendix E: Therapist Demographics Form

1. Date: _____
2. Age: _____
3. Sex: □ Male □ Female □Transgender Female to Male □ Transgender Male to Female □ Gender Non-conforming
4. Race/Ethnicity: (check as many as apply):

□ White American
□ African American
□ Asian American/Pacific Islander
□ Hispanic American
□ Native American/Alaskan Native
□ Middle Eastern
□ Multiethnic (please specify: _____)
□ International (please specify: _____)
□ Other (please specify: _____)

5. Highest educational degree achieved: □ Bachelor's □ Master's □ Doctorate
6. Year in doctoral program: ____
6. Previous counseling experience: ____ # of years providing counseling
7. Theoretical Orientation(s):

_____

Appendix F: Physical Health in Psychotherapy Measure – Client Form

In therapy sometimes people talk about their physical health. For example, you may have constant headaches, struggles with your weight, be battling a chronic illness or disease, or other physical health condition. Sometimes these things come up in therapy and sometimes they don't. When answering the following questions, a physical health issue refers to any physical concern you have, from mild to severe.

****Remember that your therapist does not see any of your responses to the post-session measures.****

1. Did you talk about a physical health issue with your therapist in this session? ___ Yes ___ No
If yes, please complete questions 2- 10. (If no, participants are automatically directed to the second portion of the measure)

2. Who initiated talking about the physical health issue? ____ I did ____ My therapist did

3. Is this the first time you have talked about this physical health issue with your therapist? ___ Yes ___ No

4. In a few words, please describe the physical health issue(s) you talked about. (e.g., illness, sleep, diet, physical symptom). _____

5. How distressed were you by the physical health issue, prior to sharing?

0	1	2	3	4
Not at all Distressed	Slightly Distressed	Moderately Distressed	Very Distressed	Extremely Distressed

6. How much do you believe that the physical health issue relates to your mental health?

0	1	2	3	4
Not at all Related	Slightly Related	Moderately Related	Very Much Related	Extremely Related

7. How do you feel about having talked about the physical health issue?

0	1	2	3	4
Not at all Positively	Slightly Positively	Moderately Positively	Very Positively	Extremely Positively

8. We talked about the physical health issue in depth.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

9. How did your therapist respond to you talking about a physical health issue?

_____
_____
_____

Continued from question 1 of Physical Health in Psychotherapy Measure if answer is "No"

2. Do you have a physical health issue that you chose **not** to talk about with your therapist? Please note that you will not be asked to disclose this issue if you select "yes."

___ Yes ___ No

If yes, please complete items 3- 5.

3. Please describe why you chose not to talk about this physical health issue.

_____
_____
_____

4. How distressing do you find the physical health issue that you did not disclose?

0	1	2	3	4
Not at all Distressing	Slightly Distressing	Moderately Distressing	Very Distressing	Extremely Distressing

5. How much do you feel the physical health issue relates to your mental health?

0	1	2	3	4
Not at all Related	Slightly Related	Moderately Related	Very Much Related	Extremely Related

Physical Health in Psychotherapy Measure – Therapist Form

In therapy sometimes people talk about their physical health. For example, your client may have constant headaches, struggles with their weight, be battling a chronic illness or disease, or other physical health condition. Sometimes these things come up in therapy and sometimes they don't.

When answering the following questions, a physical health issue refers to any physical concern your client has, from mild to severe.

****Please remember that your client does not see any of your responses to the post-session measures.****

1. Did the client you just saw talk with you about a physical health issue in this session?
___ Yes ___ No
If yes, please complete questions 2- 9. (If no, participants are automatically directed to the second part of the measure)

2. Who initiated talking about the physical health issue ? ___ I did ___ My client did.

3. Is this the first time you have talked about this physical health issue with your client?
___ Yes ___ No

4. In a few words, please describe the physical health issue your client talked about (e.g., illness, sleep, diet, physical symptom).
_____

5. How much do you feel the physical health issue relates to your client's mental health?

0	1	2	3	4
Not at all Related	Slightly Related	Moderately Related	Very Much Related	Extremely Related

6. We talked about the physical health issue in depth.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

7. We talked about how the physical health issue(s) relates to the client's psychological concern(s). ___ Yes ___ No

8. How did you respond when your client talked about the physical health issue?
_____
_____
_____

Continued from question 1 if the answer is "No"
2. Did you get the sense that your client chose not to disclose a physical health issue in this session? ___ Yes ___ No

If yes, please complete item 3.
3. What gave you this sense?
_____
_____
_____

Appendix G: Real Relationship Inventory Short Form

Real Relationship Inventory (Short)-Client Form

Please use the following scale to evaluate your perceptions of yourself, your therapist, and your relationship with your therapist.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	2	3	4	5

R+5. My therapist liked the "real me."

G+7. I was open and honest with my therapist.

G+10. My therapist seemed genuinely connected to me.

G-12. My therapist was holding back his/her genuine self.

R+13. I appreciated my therapist's limitations and strengths.

R-14. We do not really know each other realistically.

G+15. My therapist and I were able to be authentic in our relationship

G+19. My therapist and I expressed a deep and genuine caring for one another.

R+20. I had a realistic understanding of my therapist as a person.

R-21. My therapist did not see me as I really am.

G-22. I felt there was a significant holding back in our relationship.

R+23. My therapist's perceptions of me were accurate.

Genuineness items (G): 7, 10, 12, 15, 19, 22
Realism items (R): 5, 13, 14, 20, 21, 23,
Reversed scored items: 12, 14, 21, 22

The Real Relationship Inventory (Short) - Therapist Form

Please complete the items below in terms of your relationship with your client. Use the following 1-5 scale in rating each item, placing an X in the space adjacent to the item.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1

G+2. My client and I are able to be genuine in our relationship.

R+3. My client feels liking for the "real me."

R+7. I feel there is a "real" relationship between us aside from the professional relationship.

G+8. My client and I are honest in our relationship.

G-11. My client holds back significant parts on him/herself.

G-13. There is no genuinely positive connection between us.

R+14. My client's feelings toward me seem to fit who I am as a person.

R-15. I do not like my client as a person.

G-18. It is difficult for me to express what I truly feel about my client.

R-19. My client has unrealistic perceptions of me.

R-20. My client and I have difficulty accepting each other as we really are.

G+23. My client shares with me the most vulnerable parts of him/herself.

Appendix Note: Realism subscale items = 3, 7, 14, 15, 19, 20; Genuineness subscale items = 2, 8, 11, 13, 18, 23. Reversed items = 11, 13, 15, 18, 19, 20.

Appendix H: Session Evaluation Scale

Session Evaluation Scale--Client

Instructions: Indicate how much each statement reflects your experiences **in your most recent therapy session**. *Circle one number for each item using the following scale:*

	Strongly Disagree				**Strongly Agree**
18. I am glad I attended this session.....	1	2	3	4	5
*19. I did not feel satisfied with what I got out of this session.....	1	2	3	4	5
20. I thought that this session was helpful.....	1	2	3	4	5
*21. I did not think that this session was valuable.....	1	2	3	4	5

	Not Effective				**Highly Effective**
22. Rate the overall effectiveness of this session……	1	2	3	4	5

The Session Evaluation Scale includes items 18, 19*, 20, 21*, 22. Items with asterisks (*) must be reverse scored. Scale scores are obtained by summing the values of items (after reversing the ones indicated) and then dividing by the number of items in the scale.

Session Evaluation Scale—Therapist

Instructions: Indicate how much each statement reflects your experiences in your most recent therapy session. *Circle one number for each item using the following scale:*

	Strongly Disagree				**Strongly Agree**
My client…					
1. is glad s/he attended this session	1	2	3	4	5
*2. did not feel satisfied with what s/he got out of this session	1	2	3	4	5
3. thought that this session was helpful	1	2	3	4	5
*4. did not think that this session was valuable	1	2	3	4	5

	Not Effective				**Highly Effective**
5. Rate the overall effectiveness of this session	1	2	3	4	5

Appendix I: Working Alliance Inventory (Short Revised)

Working Alliance Inventory- Short Revised (WAI-SRC)—Client

Below is a list of statements and questions about experiences people might have with their therapy or therapist. Some items refer directly to your therapist with an underlined space--as you read the sentences, mentally insert the name of your therapist in place of _____ in the text. Think about your experience in therapy, and decide which category best describes your own experience.
IMPORTANT!!! Take time to consider each question. Note that the anchors on the scales are different!

1. As a result of these sessions I am clearer as to how I might be able to change.

1	2	3	4	5
Seldom	Sometimes	Fairly Often	Very Often	Always

2. What I am doing in therapy gives me new ways of looking at my problem.

5	4	3	2	1
Always	Very Often	Fairly Often	Sometimes	Seldom

3. I believe ____ likes me.

1	2	3	4	5
Seldom	Sometimes	Fairly Often	Very Often	Always

4. ____ and I collaborate on setting goals for my therapy.

1	2	3	4	5
Seldom	Sometimes	Fairly Often	Very Often	Always

5. ____ and I respect each other.

5	4	3	2	1
Always	Very Often	Fairly Often	Sometimes	Seldom

6. ____ and I are working towards mutually agreed upon goals.

5	4	3	2	1
Always	Very Often	Fairly Often	Sometimes	Seldom

7. I feel that ____ appreciates me.

1	2	3	4	5
Seldom	Sometimes	Fairly Often	Very Often	Always

8. ____ and I agree on what is important for me to work on.

5	4	3	2	1
Always	Very Often	Fairly Often	Sometimes	Seldom

9. I feel ____ cares even when I do things that he/she does not approve of.

1	2	3	4	5
Seldom	Sometimes	Fairly Often	Very Often	Always

10. I feel that the things I do in therapy will help me to accomplish the changes that I want.

5	4	3	2	1
Always	Very Often	Fairly Often	Sometimes	Seldom

11. ____ and I have established a good understanding of the kind of changes that would be good for me.

5	4	3	2	1
Always	Very Often	Fairly Often	Sometimes	Seldom

12. I believe the way we are working with my problem is correct.

1	2	3	4	5
Seldom	Sometimes	Fairly Often	Very Often	Always

Working Alliance Inventory Therapist – Short Revised (WAI-SRT)

Instructions: Below is a list of statements about the working relationship between therapist and client. Some items refer directly to your client with an underlined space -- as you read the sentences, mentally insert the name of your client in place of ___ in the text.

1. As a result of these sessions _____ is clearer as to how he/she might be able to change.

①	②	③	④	⑤
Seldom	Sometimes	Fairly Often	Very Often	Always

2. My client and I both feel confident about the usefulness of our current activity in therapy.

⑤	④	③	②	①
Always	Very Often	Fairly Often	Sometimes	Seldom

3. I believe _____ likes me.

①	②	③	④	⑤
Seldom	Sometimes	Fairly Often	Very Often	Always

4. ___and I have collaborated on setting goals for therapy.

①	②	③	④	⑤
Seldom	Sometimes	Fairly Often	Very Often	Always

5. ___and I respect each other.

⑤	④	③	②	①
Always	Very Often	Fairly Often	Sometimes	Seldom

6. ___and I are working towards mutually agreed upon goals.

⑤	④	③	②	①
Always	Very Often	Fairly Often	Sometimes	Seldom

7. I appreciate _____ as a person

①	②	③	④	⑤
Seldom	Sometimes	Fairly Often	Very Often	Always

8. We agree on what is important for _____ to work on.

⑤	④	③	②	①
Always	Very Often	Fairly Often	Sometimes	Seldom

9. I respect ____ even when he/she does things that I do not approve of.

①	②	③	④	⑤
Seldom	Sometimes	Fairly Often	Very Often	Always

10. I feel confident that the things we do in therapy will help _____ to accomplish the changes that he/she desires.

⑤	④	③	②	①
Always	Very Often	Fairly Often	Sometimes	Seldom

11. _____ and I have established a good understanding between us of the kind of changes that would be good for _____.

⑤	④	③	②	①
Always	Very Often	Fairly Often	Sometimes	Seldom

12. _____ believes the way we are working with his/her problem is correct.

①	②	③	④	⑤
Seldom	Sometimes	Fairly Often	Very Often	Always

Note: Items copyright © Adam Horvath. Goal Items: 4, 6, 8, 11; Task Items: 1, 2, 10, 12; Bond Items: 3, 5, 7, 9. Note that items were chosen to parallel Hatcher's client form.

Appendix J: Self-Report Health Status

Please list any physical health concern(s) that you currently have that effects your quality of life. This concern(s) could be something for which you have a formal diagnosis or something that is ongoing. Concerns can range from those that are mild to severe. Examples include ongoing headaches, diabetes, weight, injury, chronic pain, cancer and more.

1. _____

   Please rate the severity:

2. _____

   Please rate the severity:

3. _____

   Please rate the severity:

4. _____

Please rate the severity:

5. _____

Please rate the severity:

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