

ABSTRACT

Title of Document: SECRETS IN PSYCHOTHERAPY: A
LONGITUDINAL STUDY OF CLIENT
CONCEALMENT AND DISCLOSURE

Ellen Christina Marks, Doctor of Philosophy, 2017

Directed by: Clara E. Hill, Ph.D.
Department of Psychology

This study investigated how secrets unfold over the course of therapy in a naturalistic setting, including identifying longitudinal patterns and investigating relationships with other session-level variables. Participants were 39 client and graduate student therapist dyads in open-ended therapy at a community psychotherapy clinic. Data on concealment, disclosure, working alliance, real relationship, and session evaluation were collected after each session. Data were analyzed using Hierarchical Linear Modeling (HLM). Results demonstrated that disclosure and concealment of secrets are relatively infrequent occurrences, with disclosure occurring more often than concealment. Over time, clients became less likely to disclose a secret and less likely to conceal a significant secret. Clients rated the working alliance as lower for sessions where secrets were disclosed, but this relationship was less pronounced when the disclosed secret was

viewed as significant. Clients rated session quality as higher for sessions in which they both concealed and disclosed secrets, as well as for sessions in which a preoccupying secret was shared. Clients tended to feel neutral or positive about their disclosures and believe that the disclosure had no change on how they were viewed by their therapist. Implications for practice and research are discussed.

SECRETS IN PSYCHOTHERAPY: A LONGITUDINAL STUDY OF
CLIENT CONCEALMENT AND DISCLOSURE

by

Ellen Christina Marks

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Advisory Committee:

Professor Clara E. Hill, Ph.D., Chair

Professor Charles J. Gelso, Ph.D.

Professor Mary Ann Hoffman, Ph.D.

Professor Dennis M. Kivlighan, Jr., Ph.D.

Professor Edward P. Lemay, Jr., Ph.D.

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Dedication

To my family, who has always supported me in my many diverse endeavors, and especially to my sister, who started (and won) the “doctor race,” and without whose influence, I likely would not have set my sights on a Ph.D. in the first place.

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Chapter 1: Introduction

Secrets, defined as life experiences, personal facts, thoughts, or feelings that individuals intentionally do not disclose (Larson & Chastain, 1990), play an important role in our lives, including facilitating the attainment of emotional autonomy and the maintaining of boundaries in relationships (Finkenauer, Engels, & Meeus, 2002; Vangelisti & Caughlin, 1997). However, under certain conditions, keeping secrets may become stressful for the secret-keeper, contributing to negative physical and psychological outcomes (e.g. Finkenauer & Rimé, 1998; Pennebaker, 1985). For example, Finkenauer & Rimé (1998) found that individuals with a secret memory had more physical illnesses and were less satisfied with their lives than those who did not have a secret memory.

Conversely, disclosing secrets is generally considered to alleviate the negative effects of secrecy and to foster positive health outcomes, such as increased immune function and positive affect (e.g., Kelly, Klusas, von Weiss, & Kenny, 2001; Pennebaker & Beall, 1986). However, researchers acknowledge that there are risks to disclosing secrets as well. Baxter and Montgomery (1996) identified four risk factors related to disclosing a secret: rejection by the listener, reduction of one's autonomy and personal integrity, loss of control and self-efficacy, and the possibility of hurting or embarrassing the listener. Thus, researchers have proposed decision-making models predicting disclosure of secrets based on a weighing of risks versus benefits (Chaudoir & Fisher, 2010; Greene, 2009; Omarzu, 2000).

According to these disclosure decision-making models, psychotherapy provides hospitable conditions for disclosure—a trustworthy relationship, a safe environment, a

confidante who is contractually bound to maintain confidentiality and is furthermore likely to respond in a positive and therapeutic manner (Greene, Magsamen-Conrad, Venetis, Checton, Bagdasarov, & Banerjee, 2012; Omarzu 2000)—yet, 28 to 53% of clients in psychotherapy admit to concealing a secret from their therapist (Baumann & Hill, 2015; Hill, Thompson, Cogar, & Denman, 1993; Kelly, 1998; Kelly & Yuan, 2009). Research findings suggest that even in the ideal conditions, disclosing a secret is difficult. Farber, Feldman, and Wright (2014) found that participants who disclosed experiences of childhood sexual abuse experienced positive emotions like a sense of relief and feeling accepted/understood by therapist, but also experienced negative reactions, such as feeling emotionally overwhelmed, vulnerable, and exposed. Given the difficulty of disclosing secrets in therapy, as well as the potential detriments of concealing and benefits of disclosing, it is important to understand more about how clients handle secrets in psychotherapy.

Previous psychotherapy studies on secrets, reviewed below, have given us important information regarding how clients think about secrets in psychotherapy. However, one limitation of these studies is that they rely on retrospective interviews and surveys, asking clients about general tendencies (attitudes) related to disclosure or asking them to focus on a single secret from an entire course of therapy (e.g. Farber, Berano, & Capobianco, 2004; Kelly & Yuan, 2009). Additionally, these methodologies rely on a self-selected sample of clients who are motivated to discuss their secrets. To date, two studies have asked clients and therapists to discuss secrets and unshared reactions immediately after sessions (Hill et al., 1993; Regan & Hill, 1992). However, these studies used either a single session or volunteer clients, so we do not know how secrets emerge

over time with real psychotherapy clients. Examining how secrets unfold over the course of therapy in a naturalistic setting may yield a different picture of how secrets influence the process of therapy, furthering our understanding of the phenomenon.

Secrets in Psychotherapy

Previous researchers have found that clients were most likely to conceal secrets related to sex, desire, or relationships, and that clients concealed secrets because of shame or embarrassment (Baumann & Hill, 2015; Hill et al., 1993; Kelly & Yuan, 2009).

DeLong and Kahn (2014) found that college students' shame regarding a secret predicted lower anticipated support from their counselor, which in turn predicted less willingness to disclose. Thus, a client's negative feelings towards their own secret may prompt them to anticipate a similarly negative reaction from the therapist. Additionally, Hill et al. (1993) found that therapists were generally unable to determine what their clients were withholding from them, with only 27% of therapists accurate in their perceptions. The findings indicate that the process of concealment goes largely undetected in therapy.

Furthermore, concealing a secret has been found to be associated with lower levels of the working alliance and a weaker real relationship, indicating that clients conceal more when the relationship between therapist and client is poor (Baumann & Hill, 2015; Kelly & Yuan, 2009). In contrast, Kelly (1998) found that secret keeping was associated with lower symptomatology after controlling for self-concealment (tendency to conceal), suggesting a potential benefit of concealing. She theorized that it might be a client's tendency to self-conceal, and not the specific secret itself, that is detrimental to therapy. However, two other studies that did not partial out self-concealment (Hill et al., 1993; Kelly & Yuan, 2009) failed to replicate Kelly's (1998) findings. Additionally,

concealment of a secret has been found to be unrelated to session depth, client satisfaction, and treatment progress (Baumann & Hill, 2015; Hill et al., 1993). The mixed results indicate that we are continuing to discover just how concealment impacts the therapeutic process. A commonality of most of these studies is that they assessed concealment a single time over the course of treatment. It may be that assessing concealment as it changes from session to session will help us better understand how concealment in a particular session impacts other session-level variables.

Disclosure of Secrets in Psychotherapy

Although there is ample literature on general client self-disclosure, there is less about disclosure of secrets. Baumann and Hill (2015) found that most clients disclosed at least one secret to their therapist and that these disclosed secrets were most likely to be related to relationships and sex.

Several researchers have examined the process of disclosing a secret in psychotherapy. They found that clients experience ambivalence regarding the disclosure of secrets and other deeply personal material, feeling both the desire to disclose and the fear of doing so (Baumann & Hill, 2015; Farber et al., 2004, Farber, Berano, & Capobianco, 2006; Farber et al., 2014; Han & O'Brien, 2014). Factors that prompted a client to share a secret included trust in the therapist and a belief that the client could benefit from disclosing the secret (Baumann & Hill, 2015; Han & O'Brien, 2014).

Researchers also found that clients experienced mixed emotions immediately after disclosing a secret, but that they felt predominantly positive emotions about the disclosure once some time had passed (Baumann & Hill, 2015; Farber et al., 2014). Han and O'Brien (2015) found that receiving a calm, nonjudgmental response from their

therapist helped clients to feel positive about their disclosure and to view the disclosure as the most important moment in therapy (Han & O'Brien, 2014). It seems that disclosing a secret involves risk and is difficult in the moment, but is viewed by clients as beneficial in the long run.

Finally, Baumann and Hill (2015) found that disclosure of a secret was not related to the working alliance bond, real relationship, or treatment progress. Thus, clients report that disclosing a secret in therapy is an important part of psychotherapy, but secret disclosure has so far been found to be unrelated to other important therapeutic processes. As with the study of concealment, perhaps assessing secret disclosure at the session level will help us better understand how disclosure in a particular session relates to other process variables in that same session.

Qualities of Secrets

Additionally, while previous psychotherapy studies have examined the presence or absence of secrets in psychotherapy, it may be that different types of secrets differentially impact the therapeutic process. Researchers have begun to investigate the qualities of secrets that might contribute to negative health outcomes, including the significance, preoccupation level, and distress level associated with a particular secret. These variables have not previously been explored in psychotherapy, but doing so may provide a more nuanced understanding of when secrets are damaging in psychotherapy and therefore, important to disclose.

Preoccupation. One of the primary ways that secrecy is thought to be harmful is through preoccupation with the secret. Lane and Wegner (1995) theorized that individuals attempt to suppress thoughts related to a secret, which leads to intrusive

thoughts, prompting the individual to try even harder (without avail) to suppress thoughts about the secret. A number of studies have provided evidence for this model (Lane & Wegner, 1995; Major & Gramzow, 1999; Smart & Wegner, 1999; Wegner & Erber, 1992; Wegner, Schneider, Carter, & White, 1987).

However, it may be that only certain secrets spark preoccupation. Richards and Sillars (2014) proposed that some reasons for keeping a secret (e.g. self-protection) may be more likely to trigger this cycle of rumination than others (e.g. privacy). They found that preoccupation was associated with negative outcomes, but not all secret-keepers experienced preoccupation, indicating that individuals processed secrets differently. Similarly, Slepian, Camp, and Masicampo (2015) demonstrated that individuals instructed to recall a preoccupying secret overestimated the slant of a hill, a similar response to that of participants experiencing a physical burden. However, the participants who recalled a secret with which they were not preoccupied did not overestimate the slant of the hill, further indicating that preoccupation relates to a sense of burden, but that not all secrets are preoccupying. Therefore, it may be important to assess the level of preoccupation associated with a secret in determining the consequences of concealment or disclosure.

Significance. A second quality that may impact whether or not a secret is damaging to an individual is its level of significance or how important or “big” it is to the secret keeper (Slepian et al., 2015; Vrij, Nunkoosing, Paterson, Oosterwegel, and Soukara, 2002). Vrij et al. (2002) found that concealing a secret had a negative impact on college students only when the secret was considered important. Furthermore, individuals keeping less important secrets had higher levels of self-esteem and physical and social

wellbeing than did those who did not keep a secret at all. These findings suggest that secrets may impact the therapy process differently, depending on how significant or serious clients find them. Slepian et al. (2015) found mixed results pertaining to how significance relates to the sense of burden related to secrecy, with one study finding that participants recalling a “big” secret judged a hill slant as steeper than those recalling a “small” secret, but a second study finding no difference between groups.

Distress level. Finally, the level of distress associated with a secret may impact how a secret affects the secret holder. Stiles (1987) theorized that when individuals experience distress regarding a secret, they get relief through disclosing. Findings from several studies indicate that level of disclosure is correlated with distress level in both clinical and healthy individuals (Jacobson & Anderson, 1982; McDaniel, Stiles, & McGaughey, 1981; Stiles, Shuster, & Harrigan, 1992; Rippere, 1977). For instance, Stiles et al. (1992) found that anxious college students were more disclosing when they spoke about their anxiety than when they spoke about a happy subject, indicating a need to talk about their distress.

Kelly and McKillop (1996) identified distress level as a key factor in determining whether or not a secret needs to be disclosed. A desire to alleviate distress is also a goal identified in some disclosure decision-making models (e.g. Omarzu, 2000), suggesting that individuals consider their distress level when deciding whether or not to disclose a secret.

The Present Study

The purpose of the present study was to investigate and describe the occurrence and consequences of secrets in open-ended psychodynamic psychotherapy with clients.

Specifically, for disclosure of secrets, I examined the frequency, timing in session, content of the disclosure, distress level, significance, and preoccupation related to the secret, how difficult it was to disclose, how clients felt after disclosing, and how they perceived their therapist saw them differently as a result of disclosing the secret. For concealment, I examined the frequency, distress level, preoccupation, and significance of the secret. I was also interested in comparing concealed versus disclosed secrets to see whether they differed on the attributes of distress-level, significance, and preoccupation level.

The second purpose was to investigate longitudinal patterns related to concealment and disclosure, as well as to examine longitudinal patterns related to significance, preoccupation, and distress associated with disclosed secrets.

The third purpose was to examine how concealment and disclosure related to other key session-level constructs. Specifically, I investigated whether concealment and disclosure, as well as the distress level, significance, and preoccupation level associated with each secret, predicted client and therapist ratings of the working alliance, real relationship, and session quality. Working alliance, real relationship, and session quality are important elements of treatment because they have been found to predict treatment outcome (Hatcher & Gillaspay, 2006; Horvath, Del Re, Flückiger & Symonds, 2011; Lo Coco, Gullo, Prestano, & Gelso, 2011; Stiles, Shapiro, & Firth-Cozens, 1990). Additionally, using client ratings and therapist ratings of these variables allowed me to examine how a client's concealment and disclosure related not only to their own assessment of the working alliance and session quality, but also to the therapist's assessment of these aspects of treatment (Kenny & Cook, 1999).

Chapter 2: Method

Dataset

Data were collected over the course of 25 months in a psychology department clinic that provided individual, low-fee, psychodynamic and interpersonal psychotherapy to adult clients from the surrounding community. Treatment was open-ended, the only limiting factor being when therapists ended their clinical placements at the clinic. The measures used in this study are among a number of measures that clients and therapists completed pre-treatment, post-session, and post-treatment. In order to be included in this dataset, clients had to have completed at least 8 sessions with their therapist to ensure that the therapeutic relationship had been established and so that clients had several sessions to disclose a secret if they chose.

Participants

Therapists. Therapists were 9 doctoral Counseling Psychology student trainees (1 male, 8 female; 7 White, 2 Asian). Their ages ranged from 25 to 43 ($M = 29.33$, $SD = 5.45$). Each therapist had 2 to 4 years of previous experience providing therapy ($M = 2.33$, $SD = .71$). Each had been in a Counseling Psychology doctoral program at least two years and had completed one pre-practicum and at least two practica prior to joining the clinic. Each therapist saw 2 to 8 clients included in this data set.

Theoretical orientation, which was assessed using the Therapist Orientation Profile Scale-Revised (TOPS-R; Worthington & Dillon, 2003) showed that therapists identified as follows (on a 10-point scale): psychoanalytic/psychodynamic ($M = 8.04$, $SD = .51$), humanistic/existential ($M = 6.19$, $SD = 2.23$), multicultural ($M = 6.11$, $SD = 2.01$),

feminist ($M = 3.96$, $SD = 2.27$), cognitive-behavioral ($M = 3.59$, $SD = 1.80$), and family systems ($M = 2.30$, $SD = 1.45$).

Clients. The study included 39 participants (18 male, 21 female; 14 white, 13 black, 3 Latino/a, 3 Asian, 6 multiethnic). Ages ranged from 22 to 69 ($M = 34.31$, $SD = 11.70$). In terms of education level, 4 had a high school diploma, 5 had some college, 1 had an associate's degrees, 13 had a bachelor's degree, 2 had some graduate school, 9 had a master's degree, and 5 had doctoral degrees. The average level of symptomatology at intake, as measured by the Outcome Questionnaire 45.2 (OQ-45, Lambert et al., 1996a), was 71.00 ($SD = 18.96$), indicating that clients came in with symptoms of clinical significance (Lambert et al., 1996b). Presenting issues, as reported by therapists in the intake session, (most clients presented with multiple issues) included relationship issues ($n = 20$), depression ($n = 15$), anxiety ($n = 9$), academic/career concerns ($n = 8$), grief and loss ($n = 5$), and other ($n = 14$).

Judges. The judges who coded the qualitative data included in this study were three Counseling Psychology doctoral students (3 female, 3 white) who also were therapists at the clinic. Their ages ranged from 27 to 33 ($M = 30.00$, $SD = 3.00$).

Measures

Secret disclosure occurring in the most recent psychotherapy session was assessed using a 9-item **Secret Disclosure Measure** designed for this study. Secrets were defined for participants as "life experiences, personal facts, thoughts, or feelings that you intentionally do not disclose to most people." Participants were asked: "Did you disclose (i.e. reveal) a secret to your therapist in this session?" If they responded affirmatively, they were asked: "When in the session did the disclosure take place?" and given the

following response options: right at the beginning, near the beginning, middle, toward the end, at the end. They were then asked to describe the content of the secret using one word. Next, they were asked to use a 5-point scale, ranging from 0 (*not at all*) to 4 (*extremely/constantly*) to rate how distressed they were prior to disclosing, how significant they found the secret to be prior to disclosing, how much they thought about the secret in the week leading up to the disclosure, and how difficult it was to share the secret. Participants were then asked to rate how they felt about having shared their secret by selecting a point on a visual analog scale ranging from *very negative* (all the way to the left, scored as a -3) to *very positive* (all the way to the right, scored as a 3) with a neutral midpoint (scored as a 0) indicating no change in emotions. Finally, participants were asked to give an open-ended response regarding how they believed the disclosure changed the way their therapist views them.

Secret concealment occurring in the most recent psychotherapy session was assessed using a 4-item **Secret Concealment Measure** designed for this study. Participants were asked: “Did you choose to keep a secret from your therapist in this session?” If they responded affirmatively, they were asked to use a 5-point scale ranging from 0 (*not at all*) to 4 (*extremely/constantly*) to rate how distressing they found the secret, how significant they found the secret, and how much they had thought about the secret in the previous week.

The **Working Alliance Inventory-Short Revised** (WAI-SR; Hatcher & Gillaspy, 2006) is a 12-item measure adapted from the original 36-item Working Alliance Inventory (WAI; Horvath & Greenberg, 1989). It uses a 5-point scale ranging from 1 (*seldom*) to 5 (*always*) to assess client perceptions of the quality of the therapeutic

working alliance on three subscales: bond, tasks, and goals. The measure has been found to correlate with the other measures of the therapeutic alliance, including the Penn Helping Alliance Questionnaire ($r = .80$) (HAQ; Alexander & Luborsky, 1986) and the California Psychotherapy Alliance Scale ($r = .74$) (CALPAS; Marmar, Horowitz, Weiss, & Marziali, 1986) (Hatcher & Gillasp, 2006). It is also correlated with treatment outcome, including client and therapist ratings of improvement (Hatcher & Gillasp, 2006). Hatcher and Gillasp also created a 12-item therapist version of the measure, which was also used in this study. The reliability of the measures (Cronbach's alpha) has been demonstrated to be .90 for the client version (Hatcher & Gillasp, 2006) and .93 for the therapist version (Kivlighan, Hill, Gelso, & Baumann, 2016). Internal consistency (Cronbach's alpha) for the current study was demonstrated to be .95 for the client version and .96 for the therapist version.

The **Real Relationship Inventory–Client Form** (RRI-C; Kelley, Gelso, Fuertes, Marmarosh, & Lanier, 2010) is a 24-item measure assessing the strength of the personal relationship between therapist and client from the client's perspective. It uses a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) to measure two subscales: realism and genuineness. The measure has been found to positively correlate with ratings of the working alliance ($r = .79$), client ratings of session progress ($r = .49$), and therapist ratings of the real relationship ($r = .60$) and to negatively correlate with client avoidant attachment ($r = -.40$) (Fuertes et al., 2007; Kelley et al., 2010; Marmarosh, Gelso, Markin, Majors, Mallery, & Choi, 2009). Internal consistency (Cronbach's alpha) has been demonstrated to range from .92 to .94, and test-retest reliability has been demonstrated to be .87 (Fuertes et al., 2007). This study used a 12-item version of the 24-

item measure that was first used in Hill et al. (2013), consisting of the 12 items believed to best encompass the theoretical components of the measure. The 12-item measure correlates .91 with the original measure (Hill et al., 2013). Internal consistency (Cronbach's alpha) for the present study was .85.

The **Real Relationship Inventory–Therapist Form** (RRI-T; Gelso et al., 2005) is a 24-item measure assessing the strength of the personal relationship between therapist and client from the therapist's perspective. It uses a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) to measure two subscales: realism and genuineness. The measure has been found to positively correlate with therapist ratings of the working alliance ($r = .47$), session depth ($r = .38$), and session smoothness ($r = .40$), and to negatively correlate with therapist ratings of negative transference ($r = -.21$) (Gelso et al., 2005). Internal consistency (Cronbach's alpha) has been demonstrated to be .89 (Fuertes et al., 2007; Gelso et al., 2005). For the therapist version of this measure, I also used a 12-item version first used in Hill et al. (2013). This measure correlates .96 with the original measure. Internal consistency (Cronbach's alpha) for the current study was .92.

The **Session Evaluation Scale** (SES; Hill & Kellems, 2002) is a 4-item measure of client and therapist perceptions of session quality. Lent et al. (2006) added a 5th item to the original 4-item version to increase the range of scores. The items are rated on a 5-point scale that ranges from 1 (*strongly disagree*) to 5 (*strongly agree*). The client-rated version of the scale is positively correlated with client-rated session depth ($r = .51$), understanding ($r = .41$), working alliance, and real relationship (Hill et al., 2015; Hill & Kellems, 2002). The therapist-rated version of the scale is positively correlated with

therapist ratings of the working alliance and real relationship (Hill et al., 2015).

Reliability (Cronbach's alpha) has been demonstrated to be .93 for the client form and .90 for the therapist form (Hill et al., 2015). The reliability for the current study was demonstrated to be .87 for the client form and .94 for the therapist form.

The **Self-Concealment Questionnaire** (SCS; Larson & Chastain, 1990) is a 10-item measure of an individual's tendency to purposefully keep information from others. It uses a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The questionnaire assesses three aspects of self-concealment: how much someone keeps information to themselves, the presence of a distressing secret, and apprehension regarding sharing personal information with others. The scale was negatively correlated with measures of self-disclosure and is positively related to anxiety, depression, chronic pain, and other psychological and physical symptoms (Kelly & Achter, 1995; Larson & Chastain; Uysal & Lu, 2011). Reliability for the scale (Cronbach's alpha) was measured at .83 and test-retest reliability was shown to be .81 (Larson & Chastain, 1990). Internal consistency (Cronbach's alpha) for the current study was demonstrated to be .87.

The **Outcome Questionnaire 45.2** (OQ-45; Lambert et al., 1996a) is a 45-item measure that assesses symptom distress, interpersonal functioning, and social role performance. It uses a 5-point scale ranging from 0 (*never*) to 4 (*almost always*). A total score of 63 or more indicates that symptoms likely cause significant impairment or distress (Lambert et al., 1996b). The measure has been found to correlate with anxiety ($r = .41$), depression ($r = .48$), stress ($r = .36$), relationship issues ($r = .26$), and family issues ($r = .19$) (Boswell, White, Sims, Harrist, & Romans, 2013). Internal consistency (Cronbach's alpha) has been demonstrated to be .93 in a clinical sample. Internal

consistency (Cronbach's alpha) for OQ-45 completed at intake for the current study was .90.

The **Theoretical Orientation Profile Scale-Revised** (TOPS-R; Worthington & Dillon, 2003) is an 18-item measure assessing the extent to which therapists identify, conceptualize, and use interventions associated with six theoretical orientations: psychodynamic, humanistic/ existential, cognitive-behavioral, family systems, feminist, and multicultural. It uses a 10-point scale, ranging from 1 (*not at all*) to 10 (*completely*). TOPS-R scores are correlated with therapist-reported theoretical orientation (Worthington & Dillon, 2003). Internal consistencies (Cronbach's alpha) have ranged from .86 to .97 for the 6 subscales (Fleishman & Shorey, 2016; Worthington & Dillon, 2003). Internal consistencies (Cronbach's alpha) for the present study ranged from .60 to .99.

Post-therapy interview. Clients were asked, "Did you share any significant secrets while in therapy? If they did share secrets, they were asked, "What impact did it have on your experience in therapy?" Clients were also asked, "Do you still have some secrets that you never told your therapist?" If they answered yes, they were asked, "How do you feel to have ended therapy without having shared these secrets?" Finally, clients were asked, "What was the impact of the research on you?"

Procedure

Therapist recruitment and training. Therapists were recruited via email announcements within the counseling program that houses the clinic, advertising an externship opportunity with a psychodynamic and interpersonal focus. Therapists attended a 2-day orientation with the clinic directors at the beginning of each academic

year that they worked in the clinic. At this time, they also completed a demographic questionnaire and the TOPS-R. Each held a caseload of up to 6 clients and participated in weekly individual supervision and bi-weekly group supervision. Therapists did not receive specific training on working with secrets.

Client recruitment. Clients were recruited using a variety of means, including internet websites, local healthcare providers, and word of mouth. Potential clients were screened over the phone to determine eligibility for clinic services. Eligible individuals were over the age of 18, exhibited no psychotic symptoms or suicidal risk, were stable on any psychiatric medications, were willing to pay a fee of \$25 to \$50 per session, were willing to have sessions videotaped and to participate in research, and expressed interest in an insight-oriented, long-term approach to treatment. Eligible individuals were assigned to a therapist according to availability and perceived client-therapist match, as determined by the clinic co-director.

Treatment. At the intake session, clients completed the demographic questionnaire, the SCS, and the OQ-45. Sessions were typically conducted once a week for 50 minutes. Following each session, clients and therapists completed their respective versions of the WAI-SR, RRI, and SES, and clients completed the Secret Disclosure Measure and Secret Concealment Measure.

Post-treatment. One week after terminating treatment, a clinic researcher conducted a videotaped interview with each client on their experience in treatment. Since only 12 of the 39 clients included in this study completed interviews that included the questions on secrets, these interviews were not used for any main analyses, but rather, were used to illustrate the results found in other analyses.

Coding qualitative data. Two items in the Secret Disclosure Measure were open-ended responses: “In one word, please say what the disclosure was about (e.g. sex, relationship, work).” and “How has your disclosure changed the way your therapist views you, if at all?” These items were analyzed using a modified consensual qualitative research method (CQR-M; Spangler, Liu, & Hill, 2012), which allowed the judges to analyze short participant responses from a large number of sessions. First, responses were deidentified so that judges did not know from what client a response came. Two judges met to develop domains based on the responses of participants from 30 sessions. Next, a third graduate student judge joined the first two judges to modify the domains through the reading of 30 more participant responses. The remaining participant responses were categorized into the domains by all three judges. When a response was unclear, judges referenced the therapist’s note and the video of the session, in an attempt to get more context for the response.

Chapter 3: Data Analysis

The data used in my analyses have a hierarchical data structure, meaning that session-level observations are nested within client-level data, which are nested within therapist-level data, and thus, observations are nonindependent (i.e. clients sharing the same therapist will have certain similarities). Therefore, I analyzed the data using Hierarchical Linear Modeling (HLM; Raudenbush, Bryk, Cheong, Congdon, & du Toit, 2011). HLM extends ordinary least squares (OLS) regression to hierarchical data by “analyzing variance in outcome variables when the predictor variables are at varying hierarchical levels” (Woltman et al., 2012, p. 52). By accounting for the shared variance in nested data, HLM decreases the risk of Type I error in nested data structures (Woltman et al., 2012). For the analyses included in this study, 2-level and 3-level models were utilized. Level-1 consisted of session-level variables (e.g., secret disclosed or concealed in session), level-2 consisted of client-level variables (e.g., number of sessions), and level-3 (when applicable) consisted of therapist-level variables (e.g., average distress level of secrets from each therapist’s caseload).

For each of the analyses described in more detail below, I first tested the unconditional or empty model (containing no level-1, level-2, or level-3 predictors) in order to calculate the intraclass correlations (ICCs), or the proportion of variance, associated with each level of the model. In order to calculate the ICCs, I used the following equation to calculate the proportion of variance over level-3 units:

$$\rho_{ICC} = \tau_{\beta} / (\sigma^2 + \tau_{\pi} + \tau_{\beta})$$

I used the following equation to calculate the proportion of variance over level-2 units:

$$\rho_{ICC} = \tau_{\pi} / (\sigma^2 + \tau_{\pi} + \tau_{\beta})$$

For both these equations, $\sigma^2 = \text{var}(e_{ijk})$ = the variability in level-1 units in outcome

$\tau_{\pi} = \text{var}(r_{0jk})$ = the variability in level-2 units in outcome, and

$\tau_{\beta} = \text{var}(u_{00k})$ = the variability in level-3 units in outcome.

Unconditional models are tested to determine whether there is substantial variance at all levels of the model to warrant including all levels of a multilevel model (Beretvas, 2007). Lee (2000) suggested including psychotherapists in a model only when the ICC is greater than .1, indicating that 10% of the variance in the model is between therapists. Roberts (as cited in Adelson & Owen, 2012, p. 153) points out that even if the ICCs in an unconditional model are low, adding predictor variables may change dependence at each level of the model. Adelson and Owen (2012) acknowledged there are no set guidelines for interpreting ICCs and urged consideration of a number of factors, including number of psychotherapists in the study and the purpose of the study. They also cautioned that dropping levels due to low ICCs, even those as small as .05, may still increase the likelihood of Type I error. Given the small number of therapists involved in the current study ($N = 9$) as well as the exploratory nature of the study, I opted to drop levels from my models should the ICCs be particularly low. In order to reduce the chance of Type I error, I set the criteria for $>.001$, indicating that less than 0.1% of the variance is between subjects at the level in question. Thus, when the ICC for level 3 in an unconditional model was below .001, I opted to drop the third level and conduct a 2-level HLM analysis instead. When I dropped a level from a model, I retested the unconditional model using a 2-level model with no predictor variables and recalculated the ICCs. Given the unconditional model results, I then added predictor variables to my models.

Differences in Attributes Between Disclosed Versus Concealed Secrets

For these analyses, both concealed and disclosed secrets were included. The

outcome variables for these analyses were distress level, significance, and preoccupation level ratings. The predictor variable was a dummy-coded dichotomous variable that distinguished a concealed secret versus a disclosed secret (0 = concealed, 1 = disclosed).

An example of the 3-level unconditional model, using distress level as the outcome variable (similar models were created to test the unconditional models for significance and preoccupation level ratings), was:

Level-1 Model

$$\text{Distress Level}_{ijk} = \pi_{0jk} + e_{ijk}$$

Level-2 Model

$$\pi_{0jk} = \beta_{00k} + r_{0jk}$$

Level-3 Model

$$\beta_{00k} = \gamma_{000} + u_{00k}$$

An example of the 2-level unconditional model (used only when the ICC associated with level-3 was <.001 in the unconditional model), using distress level as the outcome variable, was:

Level-1 Model

$$\text{Distress Level}_{ij} = \beta_{0j} + r_{ij}$$

Level-2 Model

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

Given the unconditional model results, models were then created with distress level, significance, and preoccupation level ratings as the outcome variables and the dummy-coded variable denoting a concealed or a disclosed secret as the predictor

variable. An example of the 3-level model, with distress level as the outcome variable, was:

Level-1 Model

$$\text{Distress Level}_{ijk} = \pi_{0jk} + \pi_{1jk} * (\text{Disclose Vs Conceal}_{ijk}) + e_{ijk}$$

Level-2 Model

$$\pi_{0jk} = \beta_{00k} + r_{0jk}$$

$$\pi_{1jk} = \beta_{10k} + r_{1jk}$$

Level-3 Model

$$\beta_{00k} = \gamma_{000} + u_{00k}$$

$$\beta_{10k} = \gamma_{100} + u_{10k}$$

An example of the 2-level model (used only when the level-3 ICC from the unconditional model was $>.001$ in the unconditional model), with distress level as the outcome variable was:

Level-1 Model

$$\text{Distress Level}_{ij} = \beta_{0j} + \beta_{1j} * (\text{Disclose Vs Conceal}_{ij}) + r_{ij}$$

Level-2 Model

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + u_{1j}$$

Identifying Longitudinal Patterns of Disclosure and Concealment

The outcome variables for the longitudinal analyses were dummy-coded dichotomous variables for concealment (0 = no concealment in session, and 1 = concealment in session) and disclosure (0 = no disclosure in session, and 1 = disclosure in session), each using a Bernoulli distribution. The linear component was centered on

the median session for each client (e.g. for a client with 5 sessions, the session variable centered on session 3). The quadratic component was calculated by squaring each centered session number term. An example of a 3-level unconditional model using a Bernoulli distribution, with disclosure as the outcome variable, was:

Level-1 Model

$$\text{Prob}(\text{Disclosure}_{ijk}=1|\pi_{jk}) = \phi_{ijk}$$

$$\log[\phi_{ijk}/(1 - \phi_{ijk})] = \eta_{ijk}$$

$$\eta_{ijk} = \pi_{0jk}$$

Level-2 Model

$$\pi_{0jk} = \beta_{00k} + r_{0jk}$$

Level-3 Model

$$\beta_{00k} = \gamma_{000} + u_{00k}$$

An example of a 2-level unconditional model using a Bernoulli distribution (used only when the ICC associated with level-3 was <.001 in the unconditional model), with disclosure as the outcome variable, was:

Level-1 Model

$$\text{Prob}(\text{Disclosure}_{ij}=1|\beta_j) = \phi_{ij}$$

$$\log[\phi_{ij}/(1 - \phi_{ij})] = \eta_{ij}$$

$$\eta_{ij} = \beta_{0j}$$

Level-2 Model

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

An example of a 3-level unconditional model using a continuous distribution (which was used to calculate ICCs), with disclosure as the outcome variable, was:

Level-1 Model

$$\text{Disclosure}_{ijk} = \pi_{0jk} + e_{ijk}$$

Level-2 Model

$$\pi_{0ij} = \beta_{00k} + r_{0jk}$$

Level-3 Model

$$\beta_{00k} = \gamma_{000} + u_{00k}$$

An example of a 2-level unconditional model using a continuous distribution (used only when the ICC associated with level-3 was $<.001$ in the unconditional model), with disclosure as the outcome variable, was:

Level-1 Model

$$\text{Disclosure}_{ij} = \beta_{0j} + r_{ij}$$

Level-2 Model

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

Given the baseline model results, two growth models were tested to investigate whether there was a linear or quadratic change in disclosure or concealment over time. The linear model included only the linear component; the quadratic model included both linear and quadratic components. Additionally, number of sessions was included, centered around the grand mean, as a level-2 predictor in order to control for treatment length.

An example of the 3-level model for the linear growth model, using disclosure as the outcome variable, was:

Level-1 Model

$$\text{Prob}(\text{Disclosure}_{ijk}=1|\pi_{jk}) = \phi_{ijk}$$

$$\log[\phi_{ijk}/(1 - \phi_{ijk})] = \eta_{ijk}$$

$$\eta_{ijk} = \pi_{0jk} + \pi_{1jk}*(\text{Linear}_{ijk})$$

Level-2 Model

$$\pi_{0jk} = \beta_{00k} + \beta_{01k}*(\text{Number of Sessions}_{jk}) + r_{0jk}$$

$$\pi_{1jk} = \beta_{10k} + r_{1jk}$$

Level-3 Model

$$\beta_{00k} = \gamma_{000} + u_{00k}$$

$$\beta_{01k} = \gamma_{010} + u_{01k}$$

$$\beta_{10k} = \gamma_{100} + u_{10k}$$

An example of the 2-level model for the linear growth model (used only when the ICC associated with level-3 was <.001 in the unconditional model), using disclosure as the outcome variable, was:

Level-1 Model

$$\text{Prob}(\text{Disclosure}_{ij}=1|\beta_j) = \phi_{ij}$$

$$\log[\phi_{ij}/(1 - \phi_{ij})] = \eta_{ij}$$

$$\eta_{ij} = \beta_{0j} + \beta_{1j}*(\text{Linear}_{ij})$$

Level-2 Model

$$\beta_{0j} = \gamma_{00} + \gamma_{01}*(\text{Number of Sessions}_j) + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + u_{1j}$$

An example of the 3-level quadratic growth model, using disclosure as the outcome variable, was:

Level-1 Model

$$\text{Prob}(\text{Disclosure}_{ijk}=1|\pi_{jk}) = \phi_{ijk}$$

$$\log[\phi_{ijk}/(1 - \phi_{ijk})] = \eta_{ijk}$$

$$\eta_{ijk} = \pi_{0jk} + \pi_{1jk}*(\text{Linear}_{ijk}) + \pi_{2jk}*(\text{Quadratic}_{ijk})$$

Level-2 Model

$$\pi_{0jk} = \beta_{00k} + \beta_{01k}*(\text{Number of Sessions}_{jk}) + r_{0jk}$$

$$\pi_{1jk} = \beta_{10k} + r_{1jk}$$

$$\pi_{2jk} = \beta_{20k} + r_{2jk}$$

Level-3 Model

$$\beta_{00k} = \gamma_{000} + u_{00k}$$

$$\beta_{01k} = \gamma_{010} + u_{01k}$$

$$\beta_{10k} = \gamma_{100} + u_{10k}$$

$$\beta_{20k} = \gamma_{200} + u_{20k}$$

An example of the 2-level quadratic growth model (used only when the ICC associated with level-3 was <.001 in the unconditional model), using disclosure as the outcome variable, was:

Level-1 Model

$$\text{Prob}(\text{Disclosure}_{ij}=1|\beta_j) = \phi_{ij}$$

$$\log[\phi_{ij}/(1 - \phi_{ij})] = \eta_{ij}$$

$$\eta_{ij} = \beta_{0j} + \beta_{1j}*(\text{Linear}_{ij}) + \beta_{2j}*(\text{Quadratic}_{ij})$$

Level-2 Model

$$\beta_{0j} = \gamma_{00} + \gamma_{01}*(\text{Number of Sessions}_j) + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + u_{1j}$$

$$\beta_{2j} = \gamma_{20} + u_{2j}$$

Longitudinal Patterns Related to Distress Level, Significance, and Preoccupation

Additionally, I tested both linear and quadratic growth models as predictors for distress, significance, and preoccupation associated with a disclosed secret or a concealed secret. As above, the linear component was centered on the median session number for each client, and the quadratic component was calculated by squaring each centered session number term.

Disclosure. For these analyses, only those sessions where a secret was disclosed were included. An example of the 3-level unconditional model, using distress related to a disclosed secret as the outcome variable, was:

Level-1 Model

$$\text{Disclosure Distress}_{ijk} = \pi_{0jk} + e_{ijk}$$

Level-2 Model

$$\pi_{0jk} = \beta_{00k} + r_{0jk}$$

Level-3 Model

$$\beta_{00k} = \gamma_{000} + u_{00k}$$

An example of the 2-level unconditional model (used only when the ICC associated with level-3 was <.001 in the unconditional model), using distress associated with a disclosed secret as the outcome variable, was:

Level-1 Model

$$\text{Disclosure Distress}_{ij} = \beta_{0j} + r_{ij}$$

Level-2 Model

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

Given the baseline model results, two growth models were tested to investigate whether there was a linear or quadratic change in distress, significance, or preoccupation related to disclosed secrets over time (six models total). The linear model included only the linear component; the quadratic model included both linear and quadratic components. Additionally, number of sessions was included, centered around the grand mean, as a level-2 predictor to control for treatment length. An example of the 3-level linear growth model, using distress related to a disclosed secret as the outcome variable, was:

Level-1 Model

$$\text{Disclosure Distress}_{ijk} = \pi_{0jk} + \pi_{1jk} * (\text{Linear}_{ijk}) + e_{ijk}$$

Level-2 Model

$$\pi_{0jk} = \beta_{00k} + \beta_{01k} * (\text{Number of Sessions}_{jk}) + r_{0jk}$$

$$\pi_{1jk} = \beta_{10k} + r_{1jk}$$

Level-3 Model

$$\beta_{00k} = \gamma_{000} + u_{00k}$$

$$\beta_{01k} = \gamma_{010} + u_{01k}$$

$$\beta_{10k} = \gamma_{100} + u_{10k}$$

An example of the 2-level linear growth model (used only when the ICC associated with level-3 was <.001 in the unconditional model), using distress related to a disclosed secret as the outcome variable, was:

Level-1 Model

$$\text{Disclosure Distress}_{ij} = \beta_{0j} + \beta_{1j} * (\text{Linear}_{ij}) + r_{ij}$$

Level-2 Model

$$\beta_{0j} = \gamma_{00} + \gamma_{01} * (\text{Number of Sessions}_j) + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + u_{1j}$$

An example of the 3-level quadratic model, using distress related to a disclosed secret as the outcome variable, was:

Level-1 Model

$$\text{Disclosure Distress}_{ijk} = \pi_{0jk} + \pi_{1jk} * (\text{Linear}_{ijk}) + \pi_{2jk} * (\text{Quadratic}_{ijk}) + e_{ijk}$$

Level-2 Model

$$\pi_{0jk} = \beta_{00k} + \beta_{01k} * (\text{Number of Sessions}_{jk}) + r_{0jk}$$

$$\pi_{1jk} = \beta_{10k} + r_{1jk}$$

$$\pi_{2jk} = \beta_{20k} + r_{2jk}$$

Level-3 Model

$$\beta_{00k} = \gamma_{000} + u_{00k}$$

$$\beta_{01k} = \gamma_{010} + u_{01k}$$

$$\beta_{10k} = \gamma_{100} + u_{10k}$$

$$\beta_{20k} = \gamma_{200} + u_{20k}$$

An example of the 2-level quadratic model (used only when the ICC associated with level-3 was <.001 in the unconditional model), using distress related to a disclosed secret as the outcome variable, was:

Level-1 Model

$$\text{Disclosure Distress}_{ij} = \beta_{0j} + \beta_{1j} * (\text{Linear}_{ij}) + \beta_{2j} * (\text{Quadratic}_{ij}) + r_{ij}$$

Level-2 Model

$$\beta_{0j} = \gamma_{00} + \gamma_{01} * (\text{Number of Sessions}_j) + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + u_{1j}$$

$$\beta_{2j} = \gamma_{20} + u_{2j}$$

Concealment. For these analyses, only those sessions where a secret was concealed were included. The analyses were completed using the same procedure as listed in the previous section, and using distress, significance, and preoccupation related to a concealed secret as the outcome variables.

Relationships Between Concealment and Disclosure of Secrets and Client- and Therapist-Rated Post-Session Measures

Each of the outcome variables (client-rated WAI-SR, client-rated RRI, client-rated SES, therapist-rated WAI-SR, therapist-rated RRI, client-rated SES) were tested with three predictor variables: disclosure of a secret, concealment of a secret, and a disclosure x concealment interaction term. Disclosure of a secret was a dummy-coded dichotomous variable (0 = no disclosure in session, and 1 = disclosure in session, using a Bernoulli distribution). Concealment of a secret was also a dummy-coded dichotomous variable (0 = no disclosure in session, and 1 = disclosure in session, also using a Bernoulli distribution). Additionally, an interaction variable was created by multiplying the disclosure and concealment variables to account for sessions when both a disclosure and concealment occurred (0 = no concealment or disclosure occurred, disclosure only occurred, concealment only occurred, and 1 = both disclosure and concealment occurred in session). For each of the post-session measures, I first tested the unconditional model, containing no level-1, level-2, or level-3 predictors, in order to calculate the ICCs at each

level of the model. An example of the 3-level unconditional model, using client-rated WAI-SR as the outcome variable (similar models were created to test the unconditional models for client-rated RRI, client-rated SES, therapist-rated WAI-SR, therapist-rated RRI, and therapist-rated SES), was:

Level-1 Model

$$\text{Client-Rated WAI-SR}_{ijk} = \pi_{0jk} + e_{ijk}$$

Level-2 Model

$$\pi_{0jk} = \beta_{00k} + r_{0jk}$$

Level-3 Model

$$\beta_{00k} = \gamma_{000} + u_{00k}$$

An example of the 2-level unconditional model (used only when the ICC associated with level-3 was $<.001$ in the unconditional model), using client-rated WAI-SR as the outcome variable was:

Level-1 Model

$$\text{Client-Rated WAI-SR}_{ij} = \beta_{0j} + r_{ij}$$

Level-2 Model

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

Given the unconditional model results, models were then created with the six post-session measures as the outcome variables and the disclosure, concealment, and interaction terms as the predictor variables. An example of the 3-level model, with client-rated WAI-SR as the outcome variable, was:

Level-1 Model

$$\begin{aligned} \text{Client-Rated WAI-SR}_{ijk} &= \pi_{0jk} + \pi_{1jk}*(\text{Disclosure}_{ij}) + \pi_{2jk}*(\text{Concealment}_{ij}) \\ &+ \pi_{3jk}*(\text{Interaction}_{ij}) + e_{ijk} \end{aligned}$$

Level-2 Model

$$\pi_{0jk} = \beta_{00k} + r_{0jk}$$

$$\pi_{1jk} = \beta_{10k} + r_{1jk}$$

$$\pi_{2jk} = \beta_{20k} + r_{2jk}$$

$$\pi_{3jk} = \beta_{30k} + r_{3jk}$$

Level-3 Model

$$\beta_{00k} = \gamma_{000} + u_{00k}$$

$$\beta_{10k} = \gamma_{100} + u_{10k}$$

$$\beta_{20k} = \gamma_{200} + u_{20k}$$

$$\beta_{30k} = \gamma_{300} + u_{30k}$$

An example of the 2-level model (used only when the ICC associated with level-3 was $<.001$ in the unconditional model), with client-rated WAI-SR as the outcome variable, was:

Level-1 Model

$$\begin{aligned} \text{Client-Rated WAI-SR}_{ij} &= \beta_{0j} + \beta_{1j}*(\text{Disclosure}_{ij}) + \beta_{2j}*(\text{Concealment}_{ij}) \\ &+ \beta_{3j}*(\text{Interaction}_{ij}) + r_{ij} \end{aligned}$$

Level-2 Model

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + u_{1j}$$

$$\beta_{2j} = \gamma_{20} + u_{2j}$$

$$\beta_{3j} = \gamma_{30} + u_{3j}$$

Relationships Between Distress Level, Significance, and Preoccupation Ratings and Client- and Therapist-Rated Post-Session Measures

Additional analyses were performed to predict session outcome measures using distress, significance, and preoccupation ratings related to disclosed secrets or concealed secrets. Because the variables in the different levels are nested, they share variance with the data in the other levels. Following the procedures described by Curran and Bauer (2011) the variance in the predictor variables was partitioned into three sources: within clients, within therapists, and between therapists. For example, for level of preoccupation associated with disclosed secrets, I created the within-client predictor (level-1) by finding the average level of preoccupation for secrets disclosed by each client, and subtracting this mean preoccupation score from each session's preoccupation score for each client. This procedure is referred to as person-centering and results in a preoccupation deviation score for each session representing how much each session's preoccupation score deviates from the mean preoccupation score for that client. To create the within-therapist predictor (level-2), I used the aggregated preoccupation scores described above and averaged the aggregated scores of each therapist's clients. Then, I subtracted the therapist's average preoccupation score from each individual client's average preoccupation. This procedure is referred to as therapist-centering and results in a preoccupation deviation score for each client representing how much each client's average score deviates from their therapist's mean preoccupation score. The between-therapist predictor (level-3) was the average preoccupation rating across all clients for

each particular therapist. Similar decomposed variables were created for significance and distress level related to disclosed secrets, as well as for significance, distress, and preoccupation level ratings associated with concealed secrets.

For analyses using a 2-level model due to level-3 ICCs $< .001$, the within-client (level 1) predictor was calculated as described above. However, instead of a within-therapist (level-2) predictor, I used a between-clients (level 2) predictor, which was the average level of preoccupation (or distress or significance) for secrets disclosed by each client.

Disclosure. For this analysis, only those sessions where a secret was disclosed were included. An example of the 3-level unconditional model, using client-rated WAI-SR as the outcome variable, was:

Level-1 Model

$$\text{Client-Rated WAI-SR}_{ijk} = \pi_{0jk} + e_{ijk}$$

Level-2 Model

$$\pi_{0jk} = \beta_{00k} + r_{0jk}$$

Level-3 Model

$$\beta_{00k} = \gamma_{000} + u_{00k}$$

An example of the 2-level unconditional model (used only when the ICC associated with level-3 was $< .001$), using client-rated WAI-SR as the outcome variable, was:

Level-1 Model

$$\text{Client-Rated WAI-SR}_{ij} = \beta_{0j} + r_{ij}$$

Level-2 Model

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

Given the unconditional model results, models were created with post-session measures as the outcome variables and the within-client, within-therapist, and between-therapist components of distress, significance, and preoccupation as the predictor variables. An example of the 3-level model, with client-rated WAI-SR as the outcome variable, was:

Level-1 Model

$$\begin{aligned} \text{Client-Rated WAI-SR}_{ijk} = & \pi_{0jk} + \pi_{1jk} * (\text{Within-Client Disclosure Distress}_{ijk}) \\ & + \pi_{2jk} * (\text{Within- Client Disclosure Significance}_{ijk}) + \pi_{3jk} * (\text{Within-Client Disclosure} \\ & \text{Preoccupation}_{ijk}) + e_{ijk} \end{aligned}$$

Level-2 Model

$$\begin{aligned} \pi_{0jk} = & \beta_{00k} + \beta_{01k} * (\text{Within-Therapist Disclosure Distress}_{jk}) + \beta_{02k} * (\text{Within-Therapist} \\ & \text{Disclosure Significance}_{jk}) + \beta_{03k} * (\text{Within-Therapist Disclosure Preoccupation}_{jk}) + r_{0jk} \\ \pi_{1jk} = & \beta_{10k} + r_{1jk} \\ \pi_{2jk} = & \beta_{20k} + r_{2jk} \\ \pi_{3jk} = & \beta_{30k} + r_{3jk} \end{aligned}$$

Level-3 Model

$$\begin{aligned} \beta_{00k} = & \gamma_{000} + \gamma_{001} (\text{Between-Therapist Disclosure Distress}_k) + \gamma_{002} (\text{Between-Therapist} \\ & \text{Disclosure Significance}_k) + \gamma_{003} (\text{Between-Therapist Disclosure Preoccupation}_k) + u_{00k} \\ \beta_{01k} = & \gamma_{010} + u_{01k} \\ \beta_{02k} = & \gamma_{020} + u_{02k} \\ \beta_{03k} = & \gamma_{030} + u_{03k} \end{aligned}$$

$$\beta_{10k} = \gamma_{100} + u_{10k}$$

$$\beta_{20k} = \gamma_{200} + u_{20k}$$

$$\beta_{30k} = \gamma_{300} + u_{30k}$$

An example of the 2-level model (used only when the ICC associated with level-3 was $<.001$), with client-rated WAI-SR as the outcome variable, was:

Level-1 Model

$$\text{Client-Rated WAI-SR}_{ij} = \beta_{0j} + \beta_{1j}*(\text{Within-Client Disclosure Distress}_{ij}) + \beta_{2j}*(\text{Within-Client Disclosure Significance}_{ij}) + \beta_{3j}*(\text{Within-Client Disclosure Preoccupation}_{ij}) + r_{ij}$$

Level-2 Model

$$\beta_{0j} = \gamma_{00} + \gamma_{01}*(\text{Between-Client Disclosure Distress}_j) + \gamma_{02}*(\text{Between-Client Disclosure Significance}_j) + \gamma_{03}*(\text{Between-Client Disclosure Preoccupation}_j) + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + u_{1j}$$

$$\beta_{2j} = \gamma_{20} + u_{2j}$$

$$\beta_{3j} = \gamma_{30} + u_{3j}$$

Concealment. HLM requires multiple level-1 observations for each level-2 category and multiple level-2 observations for each level-3 category. Because many clients ($n = 8$) who concealed a secret only endorsed concealing a secret in one session over the course of therapy and many therapists ($n = 5$) did not have multiple clients who concealed at least one secret, it was not possible to use HLM to examine the relationships among session process and outcome variables and distress, significance, and preoccupation ratings related to concealed secrets.

Chapter 4: Results

Missing Data

Given that data collection began mid-treatment for six clients (4 to 26 sessions had been completed prior to the start of data collection, $M = 13.50$, $SD = 8.02$), and data collection was cut off just prior to 10 clients ending treatment (these clients had 1 to 2 more sessions in the clinic after data collection had been completed), we did not have complete data for every session for all clients. Thus, for these 16 clients with incomplete data but known length of treatment, session number and the associated linear and quadratic terms used in the longitudinal analyses were adjusted to account for the total time in treatment. An additional four clients were continuing treatment with no known endpoint, and so their data collection was cut off mid-treatment. I thus had complete data from intake to termination for 9 clients, data initial sessions for 6 clients, and data missing final sessions for 14 clients.

Of the 1446 sessions that occurred during data collection, client data were missing for 35 sessions (2%), such that 1411 sessions were included in the dataset. Similarly, therapist data were missing for 70 sessions (5%), so 1341 sessions included therapist data. HLM, the primary mode of analysis, can use existing data points to calculate slopes and intercepts, thus accommodating for missing data (Raudenbush & Bryk, 2002).

Preliminary Analyses

Frequencies and percentages of clients who concealed and/or disclosed at least one secret in therapy are displayed in Table 1. Most of the participants (85%) disclosed at least one secret to their therapists, and 41% concealed at least one secret from their therapists during treatment. The rate of disclosure and concealment for each client in the

study is displayed in Table 2. Of the 1,411 sessions included in the sample, a secret was disclosed in 217 sessions and a secret was concealed in 48 sessions. The average percentage of sessions in which disclosure and concealment occurred was computed by first calculating the percentage for each client and then averaging across clients. Disclosure of a secret occurred in an average of 18% of sessions per client, and concealment of a secret occurred in an average of 4% of sessions per client. In terms of where in the session a disclosure took place, 7.4% of disclosures took place right at the beginning of the session, 19.8% took place towards the beginning of the session, 47.9% occurred midsession, 20.7% occurred towards the end of the session, and 4.1% occurred at the end of the session. Thus, about half of the secrets disclosed were shared midsession, with the fewest disclosures occurring right at the beginning or end of a session.

Means and standard deviations for age, level of functioning at intake (as measured by the OQ-45), and tendency to self-conceal (as measured by the SCS) for participants who did versus did not conceal and who did versus did not disclose at least one secret in therapy are displayed in Table 3. Results of independent samples t-tests showed that there

Table 1

Frequencies and Percentages of Disclosing Versus Concealing Secrets

		Disclosed secret		Total
		Yes	No	
Concealed secret	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 2

Rate of Disclosure and Concealment by Client

Therapist	Client	Total Session	<u>Disclosure</u>		<u>Concealment</u>	
			# Session	% Session	# Session	% Session
1	1	38	20	52.6%	0	--
1	2	34	6	17.4%	6	17.7%
2	3	93	15	16.1%	2	2.2%
2	4	32	2	6.3%	0	--
2	5	29	26	89.7%	0	--
3	6	44	4	9.1%	0	--
3	7	33	0	--	0	--
3	8	27	6	22.2%	0	--
3	9	30	3	1.0%	1	3.3%
4	10	74	4	5.4%	0	--
4	11	149	6	4.0%	1	0.7%
4	12	70	13	18.6%	2	2.9%
4	13	68	2	2.9%	0	--
4	14	15	2	13.3%	1	6.7%
5	15	36	13	36.1%	0	--
5	16	8	5	62.5%	1	12.5%
5	17	72	9	12.5%	2	2.8%
5	18	9	0	--	0	--
5	19	49	0	--	0	--
5	20	42	5	11.9%	0	--
5	21	8	2	25.0%	1	12.5%
5	22	21	3	14.3%	1	4.8%
6	23	37	18	48.6%	17	46.0%
6	24	71	2	2.8%	1	--
6	25	61	6	9.8%	0	--
6	26	14	6	42.9%	2	14.3%
6	27	35	7	20.0%	0	--
7	28	22	3	13.6%	0	--
7	29	17	2	11.8%	0	--
8	30	28	6	21.4%	0	--
8	31	36	7	19.4%	7	19.4%
8	32	27	0	--	0	--
8	33	13	0	--	0	--
8	34	21	0	--	0	--
8	35	12	3	25.0%	0	--
8	36	8	1	12.5%	0	--
9	37	29	2	6.9%	2	6.9%
9	38	19	3	15.8%	0	--
9	39	15	4	26.7%	1	6.7%

Table 3

Comparison of Clients on Demographic Factors

	Disclose		Nondisclose		Conceal		Nonconceal	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
OQ-45	73.39	17.94	60.50	21.86	78.19	19.56	66.70	17.26
SCS	28.56	7.94	16.20	4.09	30.38	8.37	25.37	7.06
Age	32.00	9.82	47.00	13.96	33.56	9.78	34.82	13.07

was a significant age difference between those participants who disclosed a secret in therapy versus those who did not, $t(37) = 3.23, p = .003$, such that those who disclosed were younger than non-disclosers. No differences in age were found between concealers and non-concealers, $t(37) = .33, p = .75$.

ANOVAs were conducted to examine differences in level of functioning at intake and tendency to self-conceal between participants who did versus did not conceal and disclose at least one secret in therapy. There were no differences between subsamples of disclosers versus non-disclosers in terms of OQ-45, $F(1, 37) = 2.46, p = .13$, or SCS, $F(1, 30) = 4.02, p = .054$. Additionally, there were no differences between subsamples of concealers versus non-concealers in terms of OQ-45, $F(1, 37) = 3.75, p = .06$, or SCS, $F(1, 30) = 3.35, p = .08$.

Tables 4, 5, and 6 show the breakdown of differences in gender, race, and education level between participants who did versus did not disclose or conceal at least one secret. When comparing differences based on race, participants who identified as Asian, Latino/a, and multiethnic were combined into one group and compared to participants who identified as White or Black so that there were three relatively equal groups. Similarly, education level categories were combined into three relatively equal groups: high school/some college, college degree, and some graduate school/graduate

Table 4

Comparison of Clients on Gender

	Disclose	Nondisclose	Conceal	Nonconceal
Male	16	2	9	9
Female	17	4	7	14

Table 5

Comparison of Clients on Race

	Disclose	Nondisclose	Conceal	Nonconceal
White	12	2	4	10
Black	10	3	6	7
Asian/Latino/ Multiethnic	11	1	6	6

Table 6

Comparison of Clients on Education Level

	Disclose	Nondisclose	Conceal	Nonconceal
High school diploma/ Some college	9	1	4	6
College degree	12	1	4	9
Some graduate school/ Graduate degree	12	4	8	8

degree. Chi square analyses revealed no difference in gender between disclosers and non-disclosers, $\chi(1) = .47, p = .49$, or between concealers and non-concealers, $\chi(1) = 1.13, p = .29$; no differences in race between disclosers and non-disclosers, $\chi(2) = 1.06, p = .59$, or between concealers and non-concealers, $\chi(2) = 1.44, p = .49$; and no differences in education level between disclosers versus non-disclosers, $\chi(2) = 1.59, p = .38$, or between concealers versus non-concealers, $\chi(2) = 1.10, p = .58$.

Differences in Attributes Between Disclosed Versus Concealed Secrets

Table 7 shows the means, standard deviations, and within-client correlations for attributes of disclosed and concealed secrets, well as means, standard deviations, and within-client correlations for therapist and client post-session measures. Participants could endorse having disclosed or not disclosed a secret and could endorse having concealed or not concealed a secret in each session. Thus, the endorsement of disclosure or concealment of a secret was a session-level variable. Table 8 shows the ICCs, or proportion of variance, at each level of the model for all unconditional models included in this study (This table will be referenced throughout the Results section). The ICCs demonstrate that distress level, significance, and preoccupation level ratings varied considerably across sessions and somewhat across clients, however, the ratings were not significantly influenced by therapists. The unconditional model with preoccupation as the outcome variable had a level-3 ICC less than .001, and so this particular analysis used a 2-level model while the analyses for distress and significance ratings used 3-level models.

Table 9 presents the fixed effects, or the effects related to each of the predictor variables, for the differences between concealed and disclosed secrets in terms of distress level, significance, and preoccupation level ratings. There were no significant differences between secrets that were concealed versus those that were disclosed in terms of distress level ($M = 1.83, SD = 1.08$ vs. $M = 1.55, SD = 1.06, t(8) = 1.61, p = .15$) significance, ($M = 2.38, SD = 1.20$ vs. $M = 2.79, SD = .99, t(8) = -2.04, p = .08$, or preoccupation level, ($M = 1.58, SD = 1.47$ vs. $M = 1.35, SD = 1.19, t(32) = .92, p = .36$).

Table 7

Means, Standard Deviations, and Correlations of all Measures

Measure	N	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. WAIC-SR	1380	4.17	.77	--												
2. RRIC	1382	4.37	.44	.72	--											
3. SES client	1411	4.57	.59	.62	.55	--										
4. WAIT-SR	1312	4.04	.68	.32	.26	.15	--									
5. RRIT	1312	4.17	.51	.22	.15	.04	.80	--								
6. SES therapist	1382	4.30	.61	.24	.18	.17	.61	.63	--							
7. Conceal- Distress	48	1.83	1.08	.06	.04	.14	.06	.02	.03	--						
8. Conceal- Significance	48	2.38	1.20	.03	-.06	.35	-.22	.03	-.09	.63	--					
9. Conceal- Preocc	48	1.58	1.47	.54	.05	.15	.06	-.06	-.20	.01	.07	--				
10. Disclose- Distress	217	1.55	1.06	.30	.22	.27	.02	-.07	.05	--	--	--	--			
11. Disclose- Significance	217	2.80	.99	.33	.22	.27	.00	-.08	.08	--	--	--	.45	--		
12. Disclose- Preocc	217	1.35	1.21	.21	.03	.17	.12	.09	.07	--	--	--	.37	.26	--	
13. Disclose- Difficulty	217	1.43	1.17	.24	.13	-.02	.17	.19	.21	--	--	--	.51	.31	.09	--
14. Disclose- Feelings	217	1.42	1.07	.30	.16	.29	.16	.16	.13	--	--	--	.01	.06	.26	-.10

Note. WAIC-SR Bond = 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; Conceal- Distress = Distress associated with concealed secret; Conceal- Significance = Significance of concealed secret; Conceal- Preocc = Preoccupation level associated with concealed secret; Disclose- Distress = Distress associated with disclosed secret; Disclose- Significance = Significance of disclosed secret; Disclose- Preocc = Preoccupation level associated with disclosed secret; Disclose- Difficulty = Difficulty associated with disclosing secret; Disclose- Feelings = Feelings associated with secret disclosure.

Table 8

ICCs for Unconditional Models

	Within-client ICC	ICC	Within-therapist			Between-therapist			
			df	χ^2	p value	ICC	df	χ^2	p value
Comparison of Concealed vs. Disclosed Secrets									
Distress	.64	.18**	24	77.93	<.001	.04	8	14.86	.07
Significance	.77	.23**	24	86.03	<.001	.04	8	5.77	>.50
Preoccupation	.79	.20**	24	90.26	<.001	.0002	8	3.83	>.50
Preoccupation (2-level)	.79	.21**	32	104.75	<.001	---			
Longitudinal Analyses									
Disclosure	.76	.24**	30	322.35	<.001	.0002	8	9.52	.30
Disclosure (2-level)	.76	.24**	38	410.82	<.001	---			
Distress	.66	.33**	24	102.30	<.001	.02	8	11.70	.16
Significance	.73	.27**	24	75.63	<.001	.0003	8	7.13	>.50
Significance (2-level)	.72	.28**	32	118.05	<.001	---			
Preoccupation	.83	.17**	24	66.20	<.001	.0001	8	3.82	>.50
Preoccupation (2-level)	.82	.18**	32	78.52	<.001	---			
Concealment	.81	.19**	30	327.35	<.001	.0003	8	6.96	>.50
Concealment (2-level)	.79	.21**	38	373.15	<.001	---			
Distress	.73	.27*	8	20.16	.01	.003	7	5.21	>.50

Significance	.99	.001	8	9.02	.34	.0002	7	9.24	.24
Significance (2-level)	.99	.01	15	17.97	.26	---			
Preoccupation	.63	.37	8	10.61	.22	.0001	7	8.43	.30
Preoccupation (2-level)	.61	.39**	15	44.26	<.001	---			
Post-Session Measures Analyses									
Client-rated WAI	.19	.79**	30	4268.69	<.001	.02	8	8.25	.41
Disclosed Secrets Only	.24	.76**	24	687.93	<.001	.0005	8	6.97	>.50
Disclosed Secrets Only (2-level)	.24	.76**	32	831.30	<.001	---			
Client-rated RRI	.39	.61**	30	1444.35	<.001	.0005	8	7.23	>.50
Client-rated RRI (2-level)	.38	.62**	38	1910.32	<.001	---			
Disclosed Secrets Only	.42	.58**	24	193.97	<.001	.0001	8	8.98	.34
Disclosed Secrets Only (2-level)	.41	.59**	32	287.01	<.001	---			
Client-rated SES	.58	.42**	30	874.76	<.001	.00003	8	8.27	.41
Client-rated SES (2-level)	.57	.43**	38	1082.70	<.001	---			
Disclosed Secrets Only	.60	.40**	24	141.59	<.001	.0002	8	6.51	.34
Disclosed Secrets Only (2-level)	.59	.41**	32	168.25	<.001	---			
Therapist-rated WAI	.38	.45**	30	776.16	<.001	.16*	8	22.20	.005
Disclosed Secrets Only	.36	.29**	24	101.76	<.001	.35**	8	39.23	<.001
Therapist-rated RRI	.32	.68**	30	1358.66	<.001	.001	8	8.73	.37
Disclosed Secrets Only	.43	.34**	24	93.38	<.001	.23**	8	26.17	.001
Therapist-rated SES	.60	.29**	30	366.19	<.001	.12	8	23.73	.003
Disclosed Secrets Only	.63	.23**	24	67.50	<.001	.14*	8	21.29	.007

* Significance at $p < .01$

** Significance at $p < .00$

Table 9

Fixed Effects for the Differences Between Concealed Versus Disclosed Secrets in Terms of Distress Level, Significance, and Preoccupation Level Ratings

	Coeffic.	SE	<i>t</i> -ratio	df	<i>p</i> value
Intercept for Comparison on Distress, γ_{000}	1.20	.35	3.58**	8	.008
Within-Client Comparison of Distress, γ_{100}	.41	.25	1.61	8	.15
Intercept for Comparison on Significance, γ_{000}	3.13	.21	14.74***	8	<.001
Within-Client Comparison of Significance, γ_{100}	-.37	.18	-2.04	8	.08
Intercept for Comparison of Preoccupation, γ_{000}	1.21	.26	4.63**	32	<.001
Within-Client Comparison of Preoccupation, γ_{100}	.22	.23	0.92	32	.36

*** $p < 0.001$, ** $p < 0.01$

Identifying Longitudinal Patterns of Disclosure and Concealment

ICCs for the unconditional models for both disclosed secrets and concealed secrets are listed in Table 8. Variations in both disclosure and concealment were estimated to be largely related to differences between sessions and somewhat to clients, however, the ratings were not significantly related to differences between therapists. For both models, the ICCs related to level-3 variance were below .001, and thus, these analyses were conducted using 2-level models. Odds ratios for the 2-level population-average baseline models for disclosed secrets (.222668, 95% CI [.145, .341], $t(38) = -7.13$, $p < .001$) and concealed secrets (.043457, 95% CI [.025, .076], $t(38) = -11.32$, $p < .001$) were significant, indicating that the number of disclosed secrets and the number of concealed secrets included in the study were both statistically greater than 0, and thus, that there was sufficient variance in the outcome variables to warrant testing 2-level growth models.

Table 10

Fixed Effects for the Relationship Between Client Disclosure or Concealment of a Secret and Longitudinal Variables

	Coefficient	SE	t-ratio	df	p value
Linear Only Model					
Client disclosure, γ_{00}	-1.46	.22	-6.65***	37	<.001
Number of sessions, γ_{010}	-.01	.01	-2.38*	37	.02
Linear term, γ_{10}	-.03	.01	-3.15**	38	.003
Linear + Quadratic Model					
Client disclosure, γ_{00}	-1.43	.23	-6.17***	37	<.001
Number of sessions, γ_{01}	-.02	.004	-3.99***	37	<.001
Linear term, γ_{10}	-.02	.01	-2.20*	38	.03
Quadratic term, γ_{20}	.0003	.0004	.67	38	.51
Linear Only Model					
Client concealment, γ_{00}	-2.87	.25	-11.36***	37	<.001
Number of sessions, γ_{01}	-.01	.01	-1.96	37	.06
Linear term, γ_{10}	.005	.01	.55	38	.58
Linear + Quadratic Model					
Client concealment, γ_{00}	-3.86	.33	-11.58***	37	<.001
Number of sessions, γ_{01}	-.02	.01	-1.91	37	.06
Linear term, γ_{10}	-.03	.01	-2.01	38	.051
Quadratic term, γ_{20}	.0002	.0005	.39	38	.70

* $p < .05$, ** $p < .01$, *** $p < .001$

Growth models were tested to investigate whether there were linear or quadratic changes in disclosure and concealment over time. Fixed effects, or the effects related to each of the predictor variables, for each of these population-average Bernoulli models predicting client disclosure and concealment are in Table 10. For disclosure, the linear model was significant, $\gamma_{10} = -.03, t(38) = -3.15, p = .003$. The quadratic term was not a significant predictor of client disclosure when added to the model, and thus, the linear model was determined to best fit the data. Thus, the likelihood of a client disclosing in session decreased over time in a linear manner. For concealment, neither model was significant, indicating that concealment did not follow a linear or quadratic pattern over time.

Distress level, significance, and preoccupation. I tested both linear and quadratic growth models as predictors for distress, significance, and preoccupation ratings associated with disclosed secrets and concealed secrets. For these analyses, only those sessions where at least one secret was disclosed or concealed were included. ICCs for the unconditional models are listed in Table 8. For all unconditional models, variations in the outcome variables were estimated to be largely related to differences between sessions and somewhat related to clients, however, the ratings were not significantly related to differences among therapists. In the unconditional models for significance and preoccupation associated with both disclosed secrets and concealed secrets, the ICCs for level-3 were less than .001; thus, these analyses utilized 2-level models.

Given the baseline model results, growth models were tested to investigate whether there were linear and quadratic changes in distress level, significance, and preoccupation level

associated with disclosed or concealed secrets over time. Fixed effects, or the effects related to each of the predictor variables, for each of the models predicting client disclosure and concealment are in Tables 11 and 12. None of the models associated with disclosed secrets were significant, indicating that changes in distress level, significance, and preoccupation level ratings related to disclosed secrets did not follow a linear or quadratic pattern over time. For concealed secrets, there was a significant negative association with significance of a secret and the linear term, indicating that over time, the significance associated with concealed secrets decreased, $\gamma_{10} = -.03$, $t(15) = -2.15$, $p = .048$. There were no significant relationships between the linear or quadratic terms and distress level or preoccupation level related to concealed secrets. Thus, the significance associated with concealed secrets decreased over time, while there were no changes related to distress level or preoccupation.

Relationships Between Concealment and Disclosure of Secrets and Client- and Therapist-Rated Post-Session Measures

Client-rated measures. As described in the Data Analysis section, unconditional models were created to determine variance accounted for at each level of the model. ICCs for the unconditional models with client-rated WAI-SR, RRI-C, and SES as outcome variables are listed in Table 8. Variations in client-rated WAI-SR and RRI-C were estimated to be largely related to differences among clients and somewhat to sessions, however, the ratings were not significantly related to differences among therapists. Variations in client-rated SES were estimated to be related both to differences among sessions and clients, however, the ratings were not significantly related to differences among therapists. In the unconditional models for both client-rated RRI-C and SES,

Table 11

Fixed Effects for the Relationship Between Distress, Significance and Preoccupation Related to Client Disclosure and Longitudinal Variables

	Coefficient	SE	t-ratio	df	p value
Linear Only Model- Distress					
Client disclosure distress, γ_{000}	1.70	.16	10.51***	8	<.001
Number of sessions, γ_{010}	-.003	.004	-1.63	8	.55
Linear term, γ_{100}	.01	.01	1.43	8	.19
Linear + Quad Model- Distress					
Client disclosure distress, γ_{000}	1.61	.19	8.43***	8	<.001
Number of sessions, γ_{010}	-.01	.004	-1.57	8	.16
Linear term, γ_{100}	.01	.004	2.09	8	.07
Quadratic term, γ_{200}	.002	.001	1.60	8	.27
Linear Only Model- Significance					
Client disclosure significance, γ_{00}	2.80	.12	23.37***	31	<.001
Number of sessions, γ_{01}	-.003	.004	-.76	31	.45
Linear term, γ_{10}	.01	.005	1.39	32	.17
Linear + Quadratic Model- Significance					
Client disclosure significance, γ_{00}	2.76	.11	24.50***	31	<.001
Number of sessions, γ_{01}	-.003	.01	-.78	31	.44
Linear term, γ_{10}	.01	.01	2.00	32	.054
Quadratic term, γ_{20}	.0004	.0002	1.50	32	.14
Linear Only Model- Preoccupation					
Client disclosure preoccupation, γ_{00}	1.54	.13	11.64***	31	<.001
Number of sessions, γ_{01}	-.01	.004	-1.48	31	.15
Linear term, γ_{10}	.01	.01	1.41	32	.17
Linear + Quadratic Model- Preoccupation					
Client disclosure preoccupation, γ_{00}	1.56	.14	10.86***	31	<.001
Number of sessions, γ_{01}	-.005	.004	-1.15	31	.26
Linear term, γ_{10}	.01	.01	1.33	32	.19
Quadratic term, γ_{20}	-.00005	.0003	-.16	32	.87

*** $p < .001$

Table 12

Fixed Effects for the Relationship Between Distress, Significance and Preoccupation Related to Client Concealment and Longitudinal Variables

	Coefficient	SE	t-ratio	df	p value
Linear Only Model- Distress					
Client concealment distress, γ_{000}	2.30	.37	6.29***	7	<.001
Number of sessions, γ_{010}	-.01	.01	-.83	7	.43
Linear term, γ_{100}	-.01	.01	-.53	7	.62
Linear + Quad Model- Distress					
Client concealment distress, γ_{000}	2.40	.34	7.00***	7	<.001
Number of sessions, γ_{010}	-.02	.02	-1.39	7	.21
Linear term, γ_{100}	-.02	.01	-1.41	7	.20
Quadratic term, γ_{200}	.002	.002	1.01	7	.34
Linear Only Model- Significance					
Client concealment significance, γ_{00}	2.30	.16	13.98***	14	<.001
Number of sessions, γ_{01}	-.01	.01	-2.00	14	.07
Linear term, γ_{10}	-.03	.01	-2.23*	15	.04
Linear + Quadratic Model- Significance					
Client concealment significance, γ_{00}	2.11	.29	7.33***	14	<.001
Number of sessions, γ_{01}	-.02	.01	-1.45	14	.17
Linear term, γ_{10}	-.03	.01	-2.15*	15	.048
Quadratic term, γ_{20}	.001	.001	.96	15	.36
Linear Only Model- Preoccupation					
Client concealment preoccupation, γ_{00}	1.55	.32	4.75***	14	<.001
Number of sessions, γ_{01}	-.001	.01	-.07	14	.95
Linear term, γ_{10}	-.01	.01	-.71	15	.49
Linear + Quadratic Model- Preoccupation					
Client concealment preoccupation, γ_{00}	2.00	.44	4.60***	14	<.001
Number of sessions, γ_{01}	.01	.01	1.01	14	.33
Linear term, γ_{10}	-.01	.01	-.88	15	.39
Quadratic term, γ_{20}	-.002	.001	-1.43	15	.17

* $p < .05$, ** $p < .01$, *** $p < .001$

the ICCs for level-3 were less than .001, and thus, these analyses used 2-level models.

Table 13 presents the fixed effects for the relationships between client-rated WAI-SR, RRI-C, and SES, and client disclosure, client concealment, and the interaction term (disclosure x concealment). There was a significant relationship between client-rated WAI-SR and client disclosure, $\gamma_{100} = -.13$, $t(8) = -3.03$, $p = .02$, such that clients tended to rate the working alliance as lower in sessions where they disclosed versus sessions where they did not disclose a secret. There were no significant relationships between client-rated WAI and client concealment or the interaction between disclosure and concealment. Additionally, there was a significant relationship between client-rated SES and the interaction term (disclosure x concealment), such that clients tended to rate sessions higher when they had both concealed and disclosed a secret in that session, $\gamma_{30} = .32$, $t(38) = 2.27$, $p = .03$. There were no other significant relationships between client-rated SES and client disclosure or concealment. Finally, there were no significant relationships between client-rated RRI-C and client disclosure, client concealment, or the interaction term.

Thus, client-rated working alliance was lower in sessions where clients disclosed a secret than in sessions where they did not. Additionally, client-rated session evaluation was higher in sessions where clients both disclosed and concealed a secret as compared to sessions where they only disclosed, only concealed, or neither concealed nor disclosed. Finally, concealment of a secret did not predict client ratings of the working alliance, real relationship, or session evaluation.

Table 13

Fixed Effects for the Relationship Between Client Disclosure or Concealment and Client- and Therapist-Rated Post-Session Scores

	Coefficient	SE	<i>t</i> -ratio	df	<i>p</i> value
Client-rated WAI, γ_{000}	4.05	0.13	30.69***	8	<.001
Within-client disclosure, γ_{100}	-.13	0.04	-3.03*	8	.02
Within-client concealment, γ_{200}	-.08	0.08	-.94	8	.38
Within-client interaction, γ_{300}	0.30	0.17	1.81	8	.11
Client-rated RRI, γ_{000}	4.34	0.06	71.89***	38	<.001
Within-client disclosure, γ_{10}	-0.03	0.03	-1.14	38	.26
Within-client concealment, γ_{20}	-.09	0.06	-1.34	38	.19
Within-client interaction, γ_{30}	0.17	0.13	1.27	38	.21
Client-rated SES, γ_{00}	4.54	0.04	70.91***	38	<.001
Within-client disclosure, γ_{10}	.06	0.04	1.42	38	.16
Within-client concealment, γ_{20}	-.12	0.10	-1.16	38	.25
Within-client interaction, γ_{30}	0.32	0.14	2.27*	38	.03
Therapist-rated WAI, γ_{000}	3.86	0.13	30.20***	8	<.001
Within-client disclosure, γ_{100}	-.07	0.05	-1.40	8	.20
Within-client concealment, γ_{200}	-.13	0.11	-1.21	8	.26
Within-client interaction, γ_{300}	.15	0.24	.60	8	.57
Therapist-rated RRI, γ_{000}	4.02	0.09	45.79***	8	<.001
Within-client disclosure, γ_{100}	-.05	0.06	-0.78	8	.46
Within-client concealment, γ_{200}	-.13	0.10	-1.27	8	.24
Within-client interaction, γ_{300}	0.01	0.23	.03	8	.98
Therapist-rated SES, γ_{000}	4.14	0.10	41.91***	8	<.001
Within-client disclosure, γ_{100}	-.02	0.05	-0.53	8	.61
Within-client concealment, γ_{200}	-.13	0.12	-1.14	8	.29
Within-client interaction, γ_{300}	-.27	0.23	-1.20	8	.27

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Therapist-rated measures. ICCs for the unconditional models for therapist-rated WAI-SR, RRI-T, and SES are listed in Table 8. Variations in therapist-rated WAI-SR were estimated to be related to differences between sessions, clients, and therapists. Variations in therapist-rated RRI-T were estimated to be largely related to differences among clients and somewhat among sessions, but were not significantly related to differences among therapists. Variations in therapist-rated SES were estimated to be largely related to differences among sessions and somewhat among clients, but were not significantly related to differences among therapists.

Table 13 shows that there were no significant relationships between therapist-rated WAI-SR, RRI-T, and SES, and client disclosure, client concealment, or the interaction between disclosure and concealment. Thus, therapist ratings of the relationship and session outcome were not related to whether or not a client had disclosed or concealed a secret in that session.

Distress level, significance, and preoccupation. Since about half of the clients ($n = 8$) who reported concealing a secret concealed only one secret throughout their course of therapy, and only about half of the therapists ($n = 4$) had multiple clients who concealed a secret at some point in therapy, I could not use HLM to investigate relationships between session process and outcome variables and distress, significance, and preoccupation levels related to concealed secrets. Thus, for these analyses, only those sessions where a secret was disclosed were included.

Client-Rated Measures. ICCs for the unconditional models for client-rated WAI-SR, RRI-C, and SES are listed in Table 8. Variations in client-rated WAI-SR ratings in sessions where a secret was disclosed were estimated to be largely related to differences

between clients and somewhat to differences between sessions. Variations in client-rated RRI-C and SES in sessions where a secret was disclosed were estimated to be largely related to differences between sessions and clients. The ratings were not significantly influenced by therapists. In the unconditional models for client-rated WAI-SR, RRI-C, and SES, the ICCs for level-3 were less than .001, and thus, all three of these analyses used 2-level models.

Table 14 presents the fixed effects for the relationships between client-rated WAI-SR, RRI-C, and SES, and distress level, significance, and preoccupation ratings related to disclosed secrets. There was a significant within-client effect for the relationship between client-rated WAI-SR and secret significance, such that clients tended to rate the working alliance higher in sessions where they disclosed a more significant secret than in sessions where they disclosed a less significant secret, $\gamma_{20} = .12$, $t(32) = 2.44$, $p = .02$. In contrast, there were no significant within-client effects for the relationship between client-rated WAI-SR and either distress or preoccupation associated with a disclosed secret.

Furthermore, there was a significant within-client effect for the relationship between client-rated SES and secret preoccupation, such that clients tended to rate the session quality as higher in sessions where they had disclosed a more preoccupying secret than in sessions where they had disclosed a less preoccupying secret, $\gamma_{30} = .06$, $t(32) = 2.09$, $p = .04$. In contrast, there were no significant within-client effects for the relationship between client-rated SES and either distress or significance associated with a disclosed secret.

Table 14

*Fixed Effects for the Relationship Between Client- and Therapist-Rated Postsession**Scores and Disclosed Secret Distress, Significance, and Preoccupation Level*

	Coefficient	SE	t-ratio	df	p value
Client-rated WAI, γ_{00}	3.20	.54	5.96***	29	<.001
Between-client distress, γ_{01}	.11	.20	.58	29	.57
Between-client significance, γ_{02}	.18	.23	.79	29	.44
Between-client preoccupation, γ_{03}	.06	.17	.33	29	.75
Within-client distress, γ_{10}	.02	.05	.32	32	.75
Within-client significance, γ_{20}	.12	.05	2.44*	32	.02
Within-client preoccupation, γ_{30}	.02	.03	.62	32	.54
Client-rated RRI, γ_{00}	4.21	.31	13.67***	29	<.001
Between-client distress, γ_{01}	.10	.12	.91	29	.37
Between-client significance, γ_{02}	.01	.13	.08	29	.94
Between-client preoccupation, γ_{03}	-.04	.10	-.38	29	.71
Within-client distress, γ_{20}	.01	.03	.38	32	.71
Within-client significance, γ_{10}	.01	.03	.34	32	.73
Within-client preoccupation, γ_{20}	-.005	.03	-.21	32	.83
Client-rated SES, γ_{00}	4.25	.24	17.76***	29	<.001
Between-client distress, γ_{01}	-.04	.08	-.48	29	.63
Between-client significance, γ_{02}	.11	.10	1.06	29	.30
Between-client preoccupation, γ_{03}	.13	.08	1.63	29	.11
Within-client distress, γ_{10}	-.03	.04	-.83	32	.41
Within-client significance, γ_{20}	.02	.04	.51	32	.62
Within-client preoccupation, γ_{30}	.06	.03	2.09*	32	.04
Therapist-rated WAI, γ_{000}	6.91	.85	8.05***	5	<.001
Between-therapist distress, γ_{001}	-.15	.29	-.51	5	.63
Between-therapist significance, γ_{002}	-.78	.32	-2.42	5	.06
Between-therapist preoccupation, γ_{003}	-.42	.31	-1.37	5	.23
Within-therapist distress, γ_{010}	.04	.15	.29	8	.78
Within-therapist significance, γ_{020}	-.20	.27	-.76	8	.47
Within-therapist preoccupation, γ_{030}	.05	.08	.61	8	.56

Within-client distress, γ_{100}	-.03	.05	-.65	8	.53
Within-client significance, γ_{200}	.02	.04	.43	8	.68
Within-client preoccupation, γ_{300}	.05	.03	1.46	8	.18
Therapist-rated RRI, γ_{000}	6.37	.66	9.62***	5	<.001
Between-therapist distress, γ_{001}	-.31	.24	-1.28	5	.26
Between-therapist significance, γ_{002}	-.61	.29	-2.12	5	.09
Between-therapist preoccupation, γ_{003}	-.10	.23	-.41	5	.70
Within-therapist distress, γ_{010}	.11	.15	.70	8	.50
Within-therapist significance, γ_{020}	-.30	.19	-1.63	8	.14
Within-therapist preoccupation, γ_{030}	-.03	.09	-.35	8	.74
Within-client distress, γ_{100}	-.07	.05	-1.47	8	.18
Within-client significance, γ_{200}	-.01	.06	-.13	8	.90
Within-client preoccupation, γ_{300}	.05	.03	1.68	8	.13
Therapist-rated SES, γ_{000}	4.66	.98	4.77**	5	.005
Between-therapist distress, γ_{001}	-.12	.21	-.55	5	.61
Between-therapist significance, γ_{002}	-.08	.32	-.25	5	.81
Between-therapist preoccupation, γ_{003}	-.10	.36	-.27	5	.80
Within-therapist distress, γ_{010}	.11	.16	.68	8	.52
Within-therapist significance, γ_{020}	-.15	.15	-1.04	8	.33
Within-therapist preoccupation, γ_{030}	-.10	.09	-1.03	8	.33
Within-client distress, γ_{100}	-.03	.07	-.47	8	.65
Within-client significance, γ_{200}	.08	.06	1.41	8	.20
Within-client preoccupation, γ_{300}	.04	.04	.85	8	.42

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Additionally, there were no significant within-client effects for the relationship between client-rated RRI-C and distress, significance, or preoccupation associated with a disclosed secret. Furthermore, there were no significant between-client (level 2) effects for relationships between client-rated WAI-SR, RRI, and SES and distress, significance, or preoccupation associated with a disclosed secret.

Thus, in sessions where a secret was disclosed, clients rated the working alliance as higher in sessions when they disclosed a more significant versus less significant secret. They also rated session quality as higher when they disclosed a more preoccupying versus less preoccupying secret. There was no relationship between RRI-C and distress level, significance, or preoccupation ratings.

Therapist-Rated Measures. ICCs for the unconditional models for therapist-rated WAI-SR, RRI-T, and SES are listed in Table 8. Variations in therapist-rated WAI-SR, RRI-T, and SES were estimated to be related to differences between sessions, clients, and therapists.

Table 14 shows that there were no significant within-client, within-therapist, or between-therapist effects for the relationships between therapist-rated WAI, RRI, and SES and distress, significance, or preoccupation associated with a disclosed secret. Thus, in sessions where a secret was disclosed, there was no relationship between client-rated attributes of disclosed secrets (i.e. distress level, significance, and preoccupation level) and therapist-rated working alliance, real relationship, and session evaluation.

Qualitative Data

Table 15 shows the frequencies of the types of secrets clients disclosed in therapy as described in a single word or phrase. There were 14 content categories, plus one

additional category for secrets whose content were unclear. The most common types of secrets disclosed in therapy were secrets about relationships/relationship patterns (n = 68, e.g. relationships, dating, trust), secrets about family (n = 28, e.g. family, brother, parent), judgments about self (n = 24, e.g. self-hate, ashamed of my race), and sexual secrets (n = 22, e.g. sex, affair, sex compulsion).

Table 16 shows the frequencies related to how clients perceived therapists as viewing them differently after they shared their secret. There were 7 categories, plus one additional category for responses that were unclear. Other than two responses being coded into two categories, all others were coded into single categories. Clients seemingly struggled to respond to this question, and many responded instead in terms of how the session or the therapy shifted. For over half of the secrets (n = 131), clients responded that there was no change. Additionally, for 23 secrets, clients were uncertain about change, and some expressed feeling confused or annoyed by the question. One client wrote: “What are you talking about??? How do I know how therapist views me. Read your question please.” Clients also reported positive changes with a number of secrets, including: greater understanding (n = 43, e.g. “Gave her insight into who I am”), general positive change (n = 6, e.g. “She was happy I opened up about a concern with our relationship”), improved relationship (n = 4, e.g. “Brought us closer”), and increased empathy (n = 3, e.g. “She has more compassion”). Finally, there were 5 disclosed secrets that were also associated with negative change (i.e. “I hope she doesn’t think I’m evil”). Thus, the majority of secrets were associated with no change or positive change.

Table 15

Content of Disclosed Secrets

	Total Secrets N = 217	Total Clients N = 33
Relationships/Relationship patterns	68	21
Family	28	8
Judgments about self	24	13
Sex	21	12
Sexual Orientation	18	1
Negative emotions	7	7
Spiritual/Existential	7	6
Health/Body	7	6
Vocation/Career	7	5
Childhood event	6	6
Therapy	5	4
Abuse/Trauma	5	3
Suicide/Self harm	4	4
Addiction/Drug use	3	3
Unclear	7	6

Table 16

Client Report of Changes to how Therapist Sees Client

Reported Change	Total Secrets N = 217	Total Clients N = 33
No change	131	25
Uncertain	23	10
Positive change		
General	6	4
Greater understanding	43	15
Improved relationship	4	3
Increased empathy	3	3
Negative change	5	5
Unclear/Other	4	4

Note. Two responses were coded in two categories because they listed two outcomes

Chapter 5: Discussion

The findings from this study indicate that both disclosure and concealment of secrets are relatively rare occurrences, that disclosure of a secret tends to occur in more sessions than does concealment, and that great variability exists among clients in terms of the number of sessions in which disclosures and concealment occur. Disclosure of secrets decreased over time while concealment did not change over time, although significance of concealed secrets did decrease over time. The working alliance was negatively related to disclosure, while session evaluation was positively related to the co-occurrence of disclosure and concealment in a session. Attributes of disclosed secrets were also related to process and outcome, with significance positively correlating with client-rated working alliance and preoccupation level positively correlating with client-rated session quality. Below, I discuss the findings related to disclosure and concealment in more detail.

Frequency of Disclosure and Concealment in Psychotherapy

A high percentage of participants (85%) reported disclosing at least one secret to their therapist, a finding similar to that of one other study that specifically assessed secret disclosure (84% in Baumann & Hill, 2015). Furthermore, almost half of the participants (41%) reported that they concealed a secret from their therapist in at least one session throughout the course of treatment, a finding also similar to those from other studies (46% in Hill et al., 1993; 40% in Kelly, 1998; 28% in Kelly & Yuan, 2009). It is particularly notable that findings were similar to those from other studies because previous studies have assessed disclosure and concealment at a single point in time, often relying on retrospective interviews, whereas I assessed disclosure and concealment immediately after every session. The similarity of findings across studies suggests that

clients are able to assess whether they have disclosed or concealed a secret in therapy even when asked retrospectively. Perhaps this is because these experiences are impactful and memorable aspects of treatment.

Additionally, 15% of participants never reported concealing or disclosing a secret in therapy. This finding is also similar to that of Baumann and Hill (2015) who reported that 10% of their sample was neither concealing nor had disclosed a secret in therapy. This subsample of clients is interesting, as it appears that secretive material does not come up for them in therapy at all. It may be that some clients do not think of the vulnerable disclosures they make in therapy as revealing secrets nor do they think of withholding certain information as concealing. One client from this group described the process as follows in their post-therapy interview: “Well, I mean, generally when you go to therapy, you talk about things that, there’s a chance that you talk about things that you do not talk to others about . . . did I share something so secretive that I would not share with others, perhaps not.” Thus, it may be that some participants did share vulnerable material in therapy, but did not define these disclosures as secrets. The same participant also stated when reflecting on concealing secrets, “I don’t prefer using the word secrets, but there are parts of myself that I would like to talk about that I did not get to talk about.” Thus, it is also likely that some participants did not share all aspects of themselves or their experiences, yet did not view this as concealing secrets. Alternatively, it may be that these clients were unwilling or unable to identify secrets they concealed or disclosed, either due to discomfort acknowledging secrets or a lack of awareness regarding the secrets they keep.

Clients disclosed at least one secret in an average of 18% of sessions over the course of treatment, indicating that disclosure of secrets is not a regular occurrence in therapy. Indeed, most sessions for most clients did not include the disclosure of a secret. At the same time, disclosures of secrets did occur once in about every 8 sessions, likely making them a salient feature of treatment process. Additionally, there was a great deal of variability in the number of sessions in which clients disclosed a secret, with one client disclosing in 90% of sessions and another disclosing in only 3% of sessions.

Clients concealed in an average of 4% of sessions over the course of treatment. Thus, concealment of secrets was a relatively rare occurrence in therapy and was more infrequent than disclosures of secrets. Other aspects of psychotherapy have been found to occur infrequently, yet still be meaningful to psychotherapy process. For instance, Hill et al. (2013) found that immediacy occurred in about 5% of the time in psychodynamic/interpersonal psychotherapy, and was recalled by clients post-treatment and perceived as beneficial. While I found that 41% of clients concealed at least one secret from their therapist, many of these clients concealed in only one or two sessions across the entire course of treatment, suggesting that concealment is a temporary versus stable process. The findings challenge Hill et al.'s (1993) assertion that secrets may be held over a long period of time, suggesting instead that concealment is a cognitive process that may be triggered in some situations and not others. At the same time, there was also quite a bit of variation between clients in terms of how much concealment was endorsed, with one client having concealed in 46% of sessions and another client having concealed in only 1% of sessions. Thus, the amount of concealment differed among clients, indicating that concealment is a unique process for each individual.

Characteristics of Clients who Disclosed Versus did not Disclose and Clients who Concealed Versus did not Conceal Secrets

A comparison of clients who disclosed secrets in at least one session versus those who did not disclose secrets in any sessions revealed no differences in terms of initial symptomatology or tendency to self-conceal. There were similarly no differences when comparing clients who concealed in at least one session with those who did not conceal in any sessions. Thus, it seems as though disclosure and concealment of secrets in therapy were not related to initial symptomatology or trait-level concealment. Secrets may have a variety of functions, some of which may increase distress (e.g. avoiding shame), while others may be adaptive (e.g. setting boundaries) (DeLong & Kahn, 2014; Finkenauer et al., 2002). Thus, it makes sense that concealment and disclosure would not be related to distressing symptoms since these processes are not necessarily related to pathology. It may also be that the unique attributes of therapy that make it conducive for disclosure helped clients who tend to self-conceal try out disclosure instead. For instance, one client share in their post-session interview: “I wasn’t really holding anything back...It was unusual. Like I said, sometimes I have trouble letting people in, better to keep them at an arm’s length, but at the same time it wasn’t that bad.” Thus, clients’ behaviors in therapy may not match their tendencies outside of therapy. Alternatively, perhaps clients who tend to conceal had trouble disclosing about keeping secrets when completing the measure or even trouble acknowledging it themselves.

Additionally, there were no differences between disclosers and non-disclosers in terms of gender, race, or education level. Previous studies have also found no differences in level of overall disclosure or disclosure of secrets and gender (Baumann & Hill, 2015;

Farber & Hall, 2002; Pattee & Farber 2008; Saypol & Farber, 2010). Other studies on disclosure have not looked at differences in terms of race or education level. It may be that disclosure is a universal phenomenon and that cultural identities do not play a large role in determining whether or not a client discloses. It also may be that any differences related to such identities were too small to detect in our sample.

There were, however, age differences between disclosers and non-disclosers, with those who disclosed being younger than those who did not. Farber et al. (2014) found that older clients perceived fewer benefits associated with disclosing about childhood sexual abuse than did younger clients, and they hypothesized that older clients may have found alternative ways of coping with difficult issues besides disclosing. If older clients do not perceive benefits of disclosing, it makes sense that these clients may be more likely to opt not to disclose as compared to younger clients. Additionally, given that the therapists were all graduate students and therefore, younger in age than many of their clients, perhaps older clients felt less willing to disclose secrets due to feeling as though a younger therapist could not understand them.

Furthermore, there were no differences between concealers and non-concealers in terms of age, gender, race, or education level. Previous findings on the relationship between gender and concealment have been mixed, with some studies finding no gender differences (Kelly & Achter, 1995; Kelly & Yuan, 2009; Larson & Chastain, 1990) and others finding that men tended to conceal more than women (Baumann & Hill, 2015; Cramer & Barry, 1999). Other studies investigating concealment have not looked at differences in terms of age, race or education level. As with disclosure, it may be that concealment is a universal phenomenon and that cultural identities do not play a large

role in determining whether or not a client conceals in therapy or that any differences related to such identities were too small to detect in our sample.

Characteristics of Disclosed Secrets

Timing of the disclosure. Disclosure was most likely to occur in the middle of a session, and least likely to occur right at the beginning or end of a session. It may feel difficult for clients to jump immediately into a disclosure. Rather, it seemed as though most warmed up to the disclosure by allowing some time to pass discussing other things before disclosing. Additionally, while therapists anecdotally discuss the “doorknob confession” (Lawrence-Lightfoot, 2003) or secrets disclosed right at the end of session, I did not find strong evidence of this phenomenon, with only 4% of secrets being disclosed at the end of a meeting.

Content of the disclosure. The most common types of secrets disclosed to therapists were about relationships or relationship patterns ($n = 68$), family ($n = 29$), judgments about self ($n = 24$) and sexual secrets ($n = 22$). Given that the therapy provided was psychodynamic and interpersonal in nature, it makes sense that relationships and family were discussed. Similarly, previous researchers have found that issues surrounding relationships were among the most commonly disclosed (Farber & Hall, 2002; Farber & Sohn, 2007), and that disclosed secrets were commonly about relationships and sex (Baumann & Hill, 2015). The categories that emerged in the current study were also similar to some of the categories in the Disclosure to Therapist Inventory-Revised (Farber & Hall, 1992; as cited in Farber & Hall, 2002), which assesses general disclosure and includes existential concerns, sexuality, negative affect, and transference issues. However, we also identified some categories of secrets that have not been previously

identified (e.g., family, judgments about self, and abuse/trauma). Differences between the current and previous studies may be because clients provided open-ended responses regarding secrets disclosed in session rather than using checklists. Additionally, an important difference between this study and the Baumann and Hill (2015) study, which also investigated disclosures of secrets, is that Baumann and Hill asked participants to choose one specific secret, whereas in the current study we inquired about all secrets that clients disclosed, which may have provided a more comprehensive list of types of secrets disclosed. Previous studies on secrets have identified sexual secrets as most common (e.g. Norton, Feldman, and Tafoya, 1974; Hill et al., 1993). However, these studies focused on secrets participants were concealing, not ones they were disclosing in therapy.

Furthermore, some clients disclosed several secrets around the same topic. For instance, one client disclosed secrets related to sexual orientation in 18 sessions. Thus, secrets may be disclosed over time and in varying degrees versus as one single event, reflecting an internal negotiation process of determining not just whether to share but how deeply and completely to share. Others, however, shared a secret in a single session about a theme that did not come up again in future disclosures. These findings further speak to the complexity and individuality associated with how secrets come up for clients in therapy. Similarly, Farber and Hall (2002) noted that disclosures varied in completeness and depth.

Consequences of Disclosed Secrets

Additionally, participants reported primarily neutral or positive responses regarding their disclosure immediately following the disclosure. Ratings of feelings about the disclosures (-3 = *very negative* to 3 = *very positive*) averaged 1.42 ($SD = 1.07$),

indicating positive feelings. Indeed, out of the 218 sessions in which a secret was disclosed, there were only 3 instances in which the client identified a negative reaction. Clients, however, also endorsed that it felt difficult to disclose ($M = 1.43$, $SD = 1.17$ on 0 to 4 scale), indicating that even though they had positive feelings afterwards, it was a difficult process. In a post-session interview, one client said, "...My reply to that one [survey question] is always the weakest possible positive because therapy is inherently vulnerable...Telling secrets is mildly unpleasant, but being here is also mildly unpleasant." Some researchers have previously found that clients felt more positive than negative emotions immediately following a disclosure (Farber et al., 2004; Saypol & Farber, 2010), whereas others have found that clients feel high levels of both positive and negative emotions (Baumann & Hill, 2015; Farber et al., 2014).

Finally, clients viewed their disclosures as primarily having no effect or a positive effect on how their therapist viewed them in therapy. Although DeLong and Kahn (2014) found that clients expected their own negative feelings about a secret to be reflected by the therapist as well, I did not find strong evidence for this, although a small number of clients did perceive negative changes. Perhaps therapists provided empathic responses that helped clients feel as though their image was preserved in the eyes of the therapist after disclosing. Some clients also endorsed feeling uncertain about the impact of the disclosure, indicating that some instances left clients with uncertainty regarding how the secret was received by the therapist. Reasons for this may include the client not explicitly labeling the disclosure as a secret as well as the therapist not providing a clear reaction. One client described the difficulty associated with reading a therapist's reaction as follows:

“It’s just hard because it wasn’t like the pretext was ‘Hey, I’m about to tell you this really big secret.’ So, I mean, in terms of, like, her getting the reaction or whatnot out of her, I didn’t really know kind of what to make of it cause it was just kind of like ‘I’m telling you this as part of the story I’m telling you’ but you don’t necessarily know that this was, like, something that was very difficult for me to tell you.”

Longitudinal Patterns of Concealment and Disclosure

On average, clients disclosed more secrets early on in treatment and fewer as time went on, perhaps because there were fewer secrets to disclose. In contrast, the only other study to specifically look at disclosure of secrets found no relationship between time and disclosure (Baumann & Hill, 2015), but this study was cross sectional.

Concealment did not follow a linear or quadratic longitudinal pattern. The lack of trends over time might be because many clients only concealed once (or not at all) over the course of therapy. However, these results are also consistent with findings from previous studies that demonstrated that concealment was not related to time in therapy (Baumann & Hill, 2015; Hill et al., 1993; Kelly & Yuan, 2009). Perhaps concealment relates more to the unique trajectory of a client’s treatment versus length of treatment. Secrets typically relate to vulnerable topics, and these topics may arise at varying points for different clients. For instance, some clients may delve quickly into challenging areas of discussion while others might open up more slowly. Furthermore, Farber et al. (2004) found that even clients who had a positive attitude towards disclosure still tended to sometimes conceal. Thus, it seems as though choosing not to conceal remains challenging, even after positive disclosure experiences.

Disclosure and Concealment in Relation to Therapy Process and Outcome

Working alliance was lower in sessions with disclosures than in sessions with no disclosures. It seems likely that revealing a secret requires a leap of faith, even in ideal circumstances, and a client may end the session wondering if the therapeutic alliance is as solid as they believed it to be and whether it was strong enough to handle the sharing of the secret. This finding fits with the vulnerability associated with disclosing secrets that other researchers have noted (Baumann & Hill, 2002; Farber et al., 2014) as well as Stiles (1984) who found that disclosure was associated with rougher therapy sessions. Conversely, it may be that clients specifically chose to share secrets in sessions where they perceived the working alliance as lower, perhaps as a way to strengthen the relationship and drive treatment tasks and goals. Researchers have found that disclosure is seen as an important component of building intimacy (e.g. Waring, Tillman, Frelick, Russell, & Weisz, 1980). Previous cross-sectional studies found no association between disclosure and working alliance (Baumann & Hill, 2015) or a positive association between overall disclosure and the working alliance (Farber & Hall, 2002). I suspect that differences between studies were because the present study was longitudinal, which allowed me to track within-client changes as well as between-client differences.

Additionally, clients evaluated more favorably those sessions in which they both concealed and disclosed at least one secret versus sessions in which they only concealed, only disclosed, or neither concealed nor disclosed. When a client is both concealing and disclosing in a session, it may be that a lot is happening in the session, which could indicate to the client that it was a productive session. Alternatively, perhaps clients experienced cognitive dissonance when they both concealed and disclosed, and in order

to alleviate anxiety related to concealing, they focused on the positive effects of the disclosure. Since I did not ask about content related to concealed secrets, it is unclear in these instances whether clients were concealing and disclosing around the same versus different topics.

Additionally, disclosure (as a main effect) was not related to the real relationship or session evaluation. Baumann and Hill (2015) similarly found no relationship between secret disclosure and the real relationship or treatment progress. Thus, it seems as though the personal bond and the value of a session exist independently of whether or not a client decided to disclose a secret in session.

Similarly, concealment (as a main effect) was not related to client ratings of the working alliance, real relationship, or session evaluation. These findings differ from those in previous cross-sectional studies that found that concealment was related to a lower working alliance and weaker real relationship (Baumann & Hill, 2015, Kelly & Yuan, 2009). Perhaps previous studies were in part examining attitudes about or tendencies to self-conceal as well as overall feelings about the therapeutic alliance, given that they asked about these variables at one point in time. The current findings challenge the notion that it is detrimental to conceal in therapy, given that concealment was not associated with lower process and outcome ratings.

Role of Distress Level, Significance, and Preoccupation Level

There were no significant differences between the distress level, significance, or preoccupation level associated with secrets that were disclosed versus those that were concealed. One possible reason for this is that secrets could be counted as both concealed and disclosed (e.g., a client could conceal a secret from their therapist and later disclose

the same secret). However, it is also possible that these factors simply did not play a consistent role in determining which secrets were concealed versus disclosed.

Distress level. Clients endorsed disclosing and concealing secrets related to a range of distress levels, indicating that variability exists in how distressing clients perceive their secrets. Although previous researchers have found a relationship between distress and disclosure (e.g. Kelly & McKillop, 1996; Stiles et al., 1992), distress level associated with concealed or disclosed secrets did not change over time, nor was it associated with session process or outcome variables in the current study.

Significance. The significance of concealed secrets decreased over time, such that clients concealed secrets that were more important and meaningful at the beginning of therapy versus later in treatment. This finding indicates that either they chose to eventually disclose these secrets or that the content of the secrets concealed became less significant over time, perhaps due to other gains made in therapy. Given that Vrij et al. (2002) showed that concealing serious secrets had negative impact on the secret keeper, but keeping less serious secrets did not, it seems to be positive that the significance of concealed secrets decreased over time.

Additionally, for secrets that were disclosed, the greater the significance of the secret, the higher the rating of the working alliance. This finding is interesting, given the finding noted above that the working alliance was rated lower for sessions in which a secret was disclosed. Thus, it appears that disclosing secrets negatively influenced the client assessment of the working alliance, but the more significant the secret, the less negatively the assessment of the working alliance was impacted. Perhaps clients perceived the working alliance as weaker after disclosing, but this response was less

pronounced when the secret was significant, and thus, deemed important to disclose. Clients may have had more confidence in their decision to disclose significant secrets. Additionally, perhaps sharing significant secrets helped clients build desired intimacy with their therapists through sharing salient information about themselves.

Preoccupation. Participants varied in the amount of time they spent thinking about their secrets, indicating that preoccupation levels did indeed vary among secrets and indicating that all secrets may not be preoccupying. For secrets that were disclosed, the greater the preoccupation level associated with the secret, the higher the rating of session quality post-disclosure. This finding provides evidence that it is not just the act of disclosing that may impact therapy, but specific attributes of the secret disclosed. Preoccupying secrets may feel especially relieving for clients to share, given that thoughts about the secret may have felt intrusive and that it likely took mental effort to suppress the secret. Lane & Wegner (1995) theorized that preoccupying thoughts must be disclosed in order to end the rumination cycle. Thus, it may be that clients experienced the session as higher quality when they were able to disclose about a preoccupying secret and end the rumination cycle, but that the disclosure did not impact session quality when the secret had not been preoccupying.

Role of Therapists in Concealment and Disclosure

Interestingly, almost none of the variance in the occurrence of secret disclosure or concealment was related to differences between therapists, but rather, variance was primarily within sessions and within therapists. Thus, the therapist did not play a large role in whether or not a client disclosed or concealed a secret. This finding is meaningful, given that researchers have noted that the confidante plays an important role in

determining the outcome of confiding a secret (Afifi & Caughlin, 2006) and that the secret holder thinks about the impact on the confidante when deciding whether to disclose (Baxter & Montgomery, 1996). In this case, it did not seem as though the listener was a factor in determining whether or not to disclose. It may be that clients assumed their therapist to be a trustworthy confidante and so the determination of whether to disclose was related more to attributes of clients and what transpired in session. It may also be that, given similar training backgrounds, the therapists had been trained to respond similarly to their clients, contributing to decreased variance between therapists.

Furthermore, neither disclosure nor concealment of a secret nor their associated distress level, significance, or preoccupation level were related to therapist-rated process and outcome measures. Perhaps other factors of the session were viewed as more salient to therapists when rating sessions. Previous studies have found that therapists are unable to tell when clients are concealing from them (Hill et al., 1993), so perhaps therapists did not know when clients were concealing or disclosing and thus, were not able to use this information when evaluating the session. Nonetheless, Kelly and Yuan (2009) found that therapists rated the working alliance as lower for clients concealing a secret versus those who were not, even when they could not correctly identify whether or not a secret was being concealed. Again, the differing methodology may help explain discrepant findings, given that Kelly and Yuan (2009) compared groups of concealers versus non-concealers, whereas we study tracked concealment for all clients over time.

Limitations

First, data were collected at a psychodynamic training clinic with adult community clients. Thus, results may have limited generalizability to other types of

therapy, particularly those where client self-disclosure may be less or more of a focus. Furthermore, given that clients were asked after each session about secrets, they may have been primed by the research questions themselves to think about their secrets and whether they wanted to disclose or conceal. Twenty-one of the participants were asked about the impact of the research on their therapy in post-therapy interviews. While none specifically stated that the questions about secrets impacted their process of therapy, 8 participants did state that the measures had an impact, including helping them reflect on goals and progress, and think about the therapeutic relationship. One participant stated: "As we are talking about [the research], I am realizing how it kind of shifted my perception. So, like, it introduced ideas that I maybe otherwise wouldn't have thought about."

Additionally, the extent to which participants fully understood the definition of secrets is unclear. Although I provided a definition of secrets, the variability in number of secrets disclosed and concealed by clients may indicate that clients used different criteria for determining what constituted a secret. It was also unclear whether clients were honest when responding to questions about secrets. Although the questionnaire stated that their therapist would not see their responses, answering these questions in the waiting room where they regularly attended therapy may have brought up feelings of discomfort, making it challenging for participants to respond fully or truthfully. Participants may also have struggled to respond to the question about how their disclosure changed the way their therapist sees them. Some responses related to how the session shifted or how the disclosure benefited therapy, indicating that participants may not have known how to evaluate their therapist's views of them. Furthermore, there were limitations in my ability

to compare concealed secrets with disclosed secrets due to asking different questions related to each. For instance, I did not ask about the content of concealed secrets, an intentional decision because it was deemed too intrusive of a question to ask someone in ongoing therapy. However, not knowing the content of the concealed secrets made it impossible to compare whether the concealed secrets had similar themes to those of the disclosed secrets or whether a secret that was initially concealed was later disclosed.

A limitation related to measurement is that distress level, significance, and preoccupation level associated with both disclosed and concealed secrets were each assessed using a single item. Single-item scales are more vulnerable to unknown biases and random measurement errors than multi-item scales (Hoeppner, Kelly, Urbanoski, & Slaymaker, 2011).

Finally, although the dataset included 1,411 sessions, degrees of freedom for the statistical tests was determined by the number of therapists ($N = 9$) at level 3 (or for some analyses, by the number of clients at level 2, $N = 39$), which limited the power associated with detecting effects and increased the possibility of Type II errors. The number of therapists included in this study were similar to other recent studies (e.g., 12 therapists in Kivlighan, Gelso, Ain, Hummel, & Markin, 2015; 14 therapists in Robinson, Hill, & Kivlighan, 2015), though low power was noted as a limitation in these studies as well.

Implications

Therapists can be aware that concealment and disclosure are infrequent events and that sessions or entire courses of treatment may transpire without secrets being disclosed or concealed. Furthermore, therapists may expect that disclosure typically occurs more often at the beginning of treatment than later, and that disclosure occurs

more frequently than concealment. Understanding this may help therapists have a framework for understanding how these processes may arise in treatment.

Additionally, clients viewed the working alliance as weaker in sessions where a secret disclosure took place. Therapists typically view the working alliance as an important barometer of the work being done in therapy and may think of decreases in the working alliance as a sign of something amiss in the relationship. However, these findings indicate that a decrease in the working alliance may also indicate the occurrence of an important therapeutic process that causes vulnerability for the client, the disclosure of a secret. Therefore, therapists can use the working alliance as a barometer of disclosure as well and ask about a client's experience of disclosing when the working alliance feels compromised. Given that therapists' own ratings of the working alliance did not change when a client disclosed a secret, however, it seems unlikely that therapists will know when clients' views of the working alliance change. It could be beneficial to utilize measures such as the ones used in this study in clinical settings to assess when important changes, such as a decrease in the client's view of the alliance, has shifted in order to address the processes underlying these changes.

Furthermore, it was not just the act of disclosing a secret that related to session process and outcome, but attributes of disclosed secrets mattered as well. Clients seem to pay attention to a secret's significance and preoccupation level when reflecting upon the session after disclosing and view the session quality as high and the working alliance as strong when they have disclosed significant and preoccupying secrets. Therapists might therefore encourage clients to consider the significance of what they are thinking of sharing as well as how much they have been preoccupied with what they are considering

sharing when they find disclosure difficult. When clients are holding content considered significant or preoccupying, therapists could also ask clients more about these content areas and also provide psychoeducation about the potential benefits of disclosing.

Given that clients primarily reported no change in how their therapist viewed them after a disclosure took place, perhaps therapists were already providing that nonjudgmental space clients needed to feel supported in their disclosure. However, at times, clients may have struggled to read their therapist's response to their secret. Thus, therapists might consider providing clear and empathic feedback to the client when they are sharing vulnerable and personal material related to the themes found in this study.

Future Directions

More studies are needed that track secret disclosure and concealment events longitudinally. Specifically, additional studies including larger numbers of therapists as well as therapists from a variety of theoretical orientations would provide important support and generalizability across different forms of therapy. It would also be interesting to focus on time-limited therapy to see whether a finite period of time influences a client's choices related to secret disclosure and concealment.

Additionally, although qualitative studies have been conducted related to the process of disclosing secrets in therapy at one time point mid-treatment or at the end of treatment, it would be interesting to interview clients immediately following a session where they concealed or disclosed a secret (e.g. conduct a phone interview following an endorsement on post-session measures) in order to learn more about the specific experiences of concealment or disclosure. It would also be interesting to use judges to

view video recordings of disclosure events as identified by clients and attempt to identify salient features of such events, as well as what precedes and follows these events.

Finally, future research could focus on the role of the therapist in facilitating and responding to disclosures. Models of disclosure and intimacy identify receiving a positive response from the listener as important to the outcome of disclosure (e.g. Chaudoir & Fisher, 2010; Reis & Shaver, 1988). For instance, the interpersonal process model of intimacy posits that intimacy grows when self-disclosure is met with an understanding and accepting response, highlighting the interpersonal nature of disclosure (Reis & Shaver, 1988). Given that clients often do not explicitly name when they are disclosing as a secret, it would be useful to learn more about the clues therapists use to identify difficult disclosures, how they choose to respond to such disclosures, and how they evaluate the effectiveness of their interventions.

Appendix A: Review of Literature

In the first two sections of this chapter, I provide a detailed review of studies focused on concealment and disclosure of client secrets in psychotherapy. In the third part of this chapter, I provide a summary of relevant studies focused on concealment and disclosure of secrets in non-counseling settings. In the final section, I summarize relevant theories that may be useful in explaining the impact of secrets on the secret holder as well as how individuals navigate the disclosure process.

Concealment in Psychotherapy

Regan and Hill (1992) examined clients' undisclosed thoughts and feelings in therapy, classifying these processes and examining their relationships to session satisfaction and symptom change. Twenty-four dyads, consisting of a graduate student counselor and a volunteer client, completed six sessions of psychotherapy (one dyad only completed four sessions). Symptom change was assessed through pre- and post- ratings of client functioning by both therapists and clients. After each session, clients and therapists reported the things they had left unsaid during the session, and therapists also attempted to identify what their clients had kept from them in the session. Clients and therapists also rated session depth and smoothness. At the end of treatment, clients rated their satisfaction with treatment. Four judges rated the valence of the undisclosed thoughts and feelings and classified each non-disclosure into one of three content categories: behaviors/cognitions, emotions, or clinical conjectures.

Clients left an average of .97 things unsaid in each session ($SD = .65$, range 0-6; Regan & Hill, 1992). Non-disclosure was unrelated to session number, and the content of the non-disclosures were typically negative in valence. Researchers found that when

participants withheld reactions related to behaviors and cognitions, they rated session depth and satisfaction as lower than when they did not withhold these types of reactions, ($r = -0.42, p < .05$ and $r = -0.54, p < .01$ for session depth and satisfaction respectively). However, when participants hid reactions related to emotions, they rated session depth, session satisfaction, and symptom change as higher than when they did not withhold these types of reactions ($r = .43, p < .05$; $r = .54, p < .01$; $r = .43, p < .05$ for session depth, satisfaction, and symptom change respectively). The researchers hypothesized that disclosing emotions may feel too vulnerable or that participants may have attempted to control strong emotions. Alternatively, since what was disclosed was not investigated, it may be that what was being said in each session had a greater impact than what was withheld.

Therapists successfully identified what clients withheld from them 17% of the time ($SD = .19$; Regan & Hill, 1992). Therapists' ability to identify what was left unsaid was negatively related to therapist ratings of session smoothness ($r = -0.42, p < .05$) and client ratings of treatment satisfaction ($r = -0.40, p < .05$), indicating that a therapists' awareness of client non-disclosure corresponded with rougher sessions and decreased treatment satisfaction. The authors suggested that being aware that a client was withholding negative reactions might have brought up anxiety for graduate student counselors, which may have contributed to negative outcomes. However, a similar study using experienced therapists similarly showed that therapist match on negative client nondisclosures was related to a decrease in helpfulness ratings of subsequent interventions (Thompson & Hill, 1992).

Limitations of the Regan and Hill (1992) study include the use of graduate student therapists, who may have had less skill and comfort than more experienced therapists at handling client nondisclosures, and volunteer clients, who may have been less symptomatic than typical clients in psychotherapy. Additionally, asking about things left unsaid may have primed clients to think about their disclosures and nondisclosures, potentially impacting their nondisclosure patterns. Finally, since what was disclosed was not investigated, it is unclear how what was said in therapy may have impacted the findings.

Hill et al. (1993) attempted to replicate the findings from Regan and Hill (1992) in long-term therapy with therapists using a variety of theoretical orientations. They investigated three different kinds of covert processes exhibited by clients: hidden reactions to specific therapist interventions, things left unsaid in session that are not in response to specific interventions, and secrets, which were identified as “major life experiences, facts, or feelings that clients do not tell their therapists” (p. 278). They specified that while reactions and things left unsaid relate to responses that occur within the session, secrets relate to events or experiences outside the session and thus, may occur over a longer period of time.

In dyads, 23 therapists and 26 clients who were engaged in ongoing, long-term therapy viewed a video recording of a mid-treatment session immediately following that session. Following each therapist intervention, therapists and clients each rated their own covert processes (intentions and helpfulness from the therapist, reactions from the client) as well as their perceptions of the other’s covert processes, and rated the depth of the session. Additionally, clients rated session satisfaction, reported things they left unsaid in

session, and provided reasoning for leaving these things unsaid. Clients were also asked to discuss secrets they had concealed from their therapists and their reasons for concealing, and therapists attempted to guess what secrets clients had hidden from them.

Forty-six percent of clients ($N = 12$) endorsed keeping at least one secret, with 9 reporting one secret and 3 reporting two secrets. Of these, 54% of clients reported sexual secrets, 14% reported secrets related to failure, 14% reported secrets related to mental health, and 18% reported “other” secrets. Concealing a secret was unrelated to session number, client-rated session satisfaction, therapist-rated session quality, or client- or therapist-rated session depth. Three judges categorized open-ended responses related to reasons for secret keeping into 4 categories: shame or embarrassment ($n = 8$), not being able to handle the disclosure ($n = 3$), believing the therapist could not handle the disclosure ($n = 2$), and no reason ($n = 3$).

Additionally, 17 clients (65%) endorsed not disclosing certain reactions in session, the majority of which were negative reactions or reactions about the therapeutic work (Hill et al., 1993). Previous studies (e.g. Rennie, 1994) have similarly found that clients may experience deference towards their therapist and withhold certain reactions from them. Twenty-seven percent of therapists were able to correctly identify the types of reaction their clients left unsaid in session, but a therapist’s ability to match their client’s unspoken reaction was not related to session process or outcome variables, a finding that differed from that of Regan and Hill (1992). Furthermore, when therapists matched on client reactions, they rated the helpfulness of their subsequent interventions as higher, but there was no relationship between therapist match and client ratings of intervention helpfulness.

Hill et al. (1993) study identified several limitations. First, it included only one session from a course of therapy with each dyad, and it was impossible to tell how representative each individual session was of treatment as a whole. Additionally, both therapists and clients had the opportunity to self-select, calling into question whether the sample was representative of therapists and clients in general or unique in some way. For instance, only 23 of the 300 therapists invited to participate did so, each therapist selected one client to invite to participate, and clients had the choice of whether or not to agree. Thus, therapists may have chosen clients with whom therapy was going well, and clients who chose to participate may have had positive relationships with their therapists.

Kelly (1998) investigated the potential benefits of maintaining a relevant secret (i.e. a secret a client considered relevant to their treatment) from one's therapist. Ten therapists recruited 1 to 10 current clients from a hospital outpatient setting to participate in the study, for a total of 42 clients. Clients had completed an average of 11.20 sessions prior to participating ($SD = 8.10$). Participants completed measures assessing symptomatology, tendency to self-conceal secrets, and tendency to present oneself favorably (social desirability). The participants also responded to open-ended questions regarding whether or not they were keeping relevant secrets in treatment, their reasons for keeping the secrets, and perceived benefits of disclosing their secrets to their therapists.

Seventeen of the clients (40%) reported that they were currently keeping at least one relevant secret from their therapist. Judges classified the secrets into one of the seven content categories: relationship problems or desires ($n = 7$), sex ($n = 4$), health ($n = 2$), substance abuse ($n = 2$), lying or delinquency ($n = 1$), and not specified ($n = 1$). Judges also identified eight reasons for not disclosing a secret: being afraid to express feelings (n

= 5), shame or embarrassment (n = 3), fear that disclosing would show how little progress had been made in therapy (n = 3), not having enough time (n = 3), choosing not to tell anyone, including therapist (n = 2), lack of motivation (n = 2), loyalty to another (n = 1), and unspecified (n = 1). Finally, judges identified five potential gains of disclosing: receiving more insight or feedback (n = 10), getting one's emotions out (n = 5), problem-solving (n = 3), providing important information (n = 3), and not specified (n = 3).

Kelly (1998) found that keeping a relevant secret was related to lower current symptomatology when controlling for dispositional tendency to self conceal, social desirability, and initial symptomatology, $t(29) = -2.00, p = .05$. Number of sessions was not related to relevant secret keeping. Other studies have similarly found that one's tendency to self-conceal is related to negative health outcomes (Kelly & Achter, 1995; Larson & Chastain; Uysal & Lu, 2011). However, the findings suggest that the act of keeping a secret from one's therapist is not detrimental and may in fact be beneficial for clients. These findings challenge the long-held assumption that difficult disclosures are vital to therapy (e.g. Farber et al., 2004; Freud 1913/1958).

Kelly (1998) noted a few limitations of the study. First, clients were recruited by their therapists and chose whether or not to participate, so clients with secrets that felt particularly vulnerable may have chosen not to participate. Additionally, she noted that the small sample size provided low statistical power and also that the correlational design made it impossible to detect causal relationships. A limitation not mentioned by Kelly (1998) is that some therapists worked with multiple participants in the study, meaning that the data from these participants were nonindependent, thus increasing the likelihood of Type I error (Woltman, Feldstain, MacKay, & Rocchi, 2012).

Kelly and Yuan (2009) sought to replicate Kelly's (1998) finding related to the benefits of secret keeping in psychotherapy and to explore the relationship between secret keeping and the working alliance. Participants were 83 clients and their 22 therapists at three outpatient hospital sites. Participants were currently in treatment and had completed 2 to 52 sessions with their current therapist ($M = 15.68$, $SD = 15.16$). All participants completed an assessment of initial symptomatology when initiating treatment. Upon agreeing to participate, participants also completed measures of current symptomatology, working alliance, and tendency to present oneself favorably, as well as checklists of presenting problems, the types of relevant secrets they were keeping, and reasons for keeping these secrets, which were created based on the open-ended responses from Kelly (1998). Therapists also assessed the working alliance and symptom change, and they attempted to identify which of their clients were keeping relevant secrets.

Kelly and Yuan (2009) found that twenty-three participants (28%) reported keeping a relevant secret, and that these were related to sex ($n = 8$), failure ($n = 6$), relationships or desire ($n = 4$), lying or cheating ($n = 3$), substance use ($n = 1$), and other unspecified content ($n = 8$). In terms of reasons for keeping their secret, participants endorsed shame or embarrassment ($n = 14$), fear of expressing feelings ($n = 11$), choosing not to tell anyone ($n = 9$), fear that disclosing would show how little progress had been made in therapy ($n = 6$), lack of motivation ($n = 3$), loyalty to someone else ($n = 1$), and unspecified ($n = 5$). Keeping a relevant secret was not related to gender or number of sessions.

Controlling for social desirability, client-rated working alliance was negatively associated with keeping a relevant secret, $t(81) = 3.12$, $p = .003$, with a large effect size

($d = -.80$). Although therapists could not tell which clients were keeping secrets, therapists also reported higher working alliances with their clients who were not keeping a secret than with those who were, $r = -.22$, $p = .05$, with a medium effect size ($d = -.55$). However, Kelly and Yuan found no association between secret keeping and symptom change. Thus, the findings do not support those of Kelly (1998) that keeping a secret was positively related to psychological functioning. However, Kelly assessed current symptoms and controlled for trait-level self-concealment, whereas Kelly and Yuan assessed symptoms change and did not control for trait-level concealment.

One limitation of the Kelly and Yuan (2009) study is that they did not provide a clear definition of a secret, meaning that participants may have interpreted the question about keeping a relevant secret in different ways. Additionally, therapists and clients both self-selected into this study, and therapists had the ability to choose which clients to invite to participate. Perhaps therapists and clients were more likely to participate if they had a strong working alliance or, for clients, if they did not have a secret that would feel threatening to discuss. Additionally, therapists saw multiple participants included in the study, but the nonindependence of observations was not accounted for in the analyses, which would have elevated the risk for Type I error (Woltman, Feldstain, MacKay, & Rocchi, 2012). Finally, Kelly and Yuan noted that the therapists in the study were cognitive-behavioral therapists and wondered how their findings might be similar or different for therapists with other theoretical orientations.

Baumann and Hill (2015) investigated concealment and disclosure of relevant secrets in ongoing psychotherapy. They aimed to understand the types of secrets clients conceal and disclose, their motivations for concealing versus disclosing, their feelings

about their choice to conceal or disclose, and the impact of these decisions on process and outcome factors. Secrets were defined for participants as life experiences, personal facts, thoughts, or feelings that they intentionally choose not to disclose. Participants were 115 clients who were currently in psychotherapy and who had completed at least 8 sessions with their current therapist. They were recruited through contacting therapists and asking them to recruit a client, and through contacting clients directly via listservs. Participants had completed an average of 117.29 ($SD = 216.53$, range 8 to 1,350) sessions.

Participants completed measures of the working alliance bond, the real relationship, and session progress via an anonymous online survey. They also completed checklists regarding the types of secrets they were keeping, reasons for keeping these secrets, gains they imagined they would receive from disclosing their secrets, and reasons they might someday choose to disclose their secrets. These checklists were based on qualitative data from Kelly (1998) and checklists from Kelly and Yuan (2009). Finally, they completed measures related to how they felt about their concealed secret and their disclosed secret. In this section, I will focus on the results pertaining to concealment.

The researchers found that 61 participants (53%) were currently concealing at least one secret from their therapist. Concealed secrets were most likely to be sexual in nature ($n = 23$) and were concealed due to shame/embarrassment ($n = 45$) or lack of motivation to address the secret ($n = 28$). Clients were most likely to report that they would choose to share their concealed secret if keeping it prevented them from making progress in therapy ($n = 40$), if their therapist directly asked about the secret ($n = 39$), or if they felt the secret was becoming burdensome ($n = 36$). They imagined they might gain insight ($n = 34$), get their emotions out ($n = 34$), and give their therapist valuable

information ($n = 31$) if they were to share their secret. However, 14 participants said they would gain nothing if they were to share their secret. Of the participants who were concealing a secret, about half ($n = 32$) believed they would eventually share their secret with their therapist.

Participants' feelings about their concealed secret were significantly more negative than positive, $t(60) = 6.35, p < .01, d = 1.18$, indicating a large effect. Client ratings of the real relationship was negatively associated with keeping a relevant secret, $F(1, 113) = 9.20, p < .001$. However, there was no relationship between concealment of a secret and the working alliance bond or treatment progress. These findings support Kelly and Yuan's (2009) finding that concealment is negatively related to the therapeutic relationship. Though assessed using different measures, the findings challenge Kelly's (1998) assertion that keeping a secret is positively related to client improvement.

Baumann and Hill (2015) noted a couple of limitations to the study. One limitation of this study was the low response rate of participants, with only 3% of therapists contacted responded to the request. Additionally, clients self-selected into the study, meaning that those who decided to participate may have been motivated to discuss their secrets, whereas those clients who were not motivated to discuss secrets might have opted not to participate. Additionally, clients in this study tended to be in long-term therapy, meaning that the results may not generalize to short-term treatment.

Summary. Findings from these studies indicate that 28 to 53% of clients conceal secrets from their therapists (Baumann & Hill, 2015; Hill et al., 1993; Kelly, 1998; Kelly & Yuan, 2009). Keeping secrets was not associated with gender or number of sessions.

Clients primarily kept secrets related to sex, relationships, and failure, and they did so mainly out of shame and embarrassment (Baumann & Hill, 2015; Kelly, 1998). Research on secrets concealed outside of therapy has similarly found that shame and fear of rejection are main motivations for concealing secrets (Derlega, Winstead, Greene, Serovich, & Elwood, 2002; Finkenaur & Rimé, 1998; Seibold, 2008; Vrij et al., 2002). Clients also tended to have more negative emotions than positive emotions regarding their concealment (Baumann & Hill, 2015).

There is disagreement regarding the relationship between secret keeping and session process and outcome variables. One study (Kelly, 1998) found that secret keeping correlated with lower current symptomatology when controlling for trait-level self-concealment. However, three other studies that did not control for trait-level self-concealment found no association between secret keeping and symptom change, treatment progress, session depth, or client satisfaction (Baumann & Hill, 2015; Hill et al., 1993; Kelly & Yuan, 2009). Finally, two studies found a negative association between secret keeping and the therapeutic alliance (Baumann & Hill, 2015; Kelly & Yuan, 2009).

Additionally, therapists generally were not aware of whether clients were hiding reactions and what they are hiding (Regan & Hill, 1992; Hill et al., 1993; Kelly & Yuan, 2009). However, there is disagreement about how therapist ability to accurately assess nondisclosure relates to session process and outcome variables. One study of brief therapy with graduate student therapists showed a positive relationship between therapist match rate and session roughness and a negative relationship between therapist match rate and treatment satisfaction, whereas a study of long-term therapy that used

experienced therapists found no relationship between therapist match and session satisfaction or depth and also found a positive correlation between therapist match and helpfulness of subsequent interventions (Hill et al., 1993; Reagan & Hill, 1992). Perhaps experienced therapists are better able to address hidden reactions and use their knowledge to enhance the helpfulness of the session. Additionally, perhaps long-term treatment is more conducive to managing hidden reactions than is brief treatment due to an established relationship and ample time to repair any ruptures that may arise.

Disclosure in Psychotherapy

Farber and Hall (2002) investigated how much clients disclose in therapy on a variety of issues and how disclosure relates to other client factors (gender, shame-proneness, and guilt-proneness) as well as the therapeutic relationship. Participants were 147 current psychotherapy clients, most of who were in long-term therapy ($M = 38.7$ months, $SD = 32$ months). Participants completed measures to assess their level of disclosure on nine different topics (e.g. sexuality, transference), their proneness to shame and guilt, and the quality of the therapeutic working alliance.

Participants endorsed a moderate level of overall disclosure ($M = 3.20$, $SD = .73$ on a 5-point scale), and they most thoroughly discussed negative feelings and intimacy issues ($M = 3.74$, $SD = .73$ and $M = 3.81$, $SD = .71$, respectively) and least thoroughly discussed issues related to sexuality and procreation ($M = 2.62$, $SD = .96$ and $M = 2.64$, $SD = .83$, respectively). There was no difference in overall levels of disclosure between men and women, but women were more thorough in their discussion of issues related to procreation than were men. Level of disclosure was unrelated to shame- and guilt-proneness. Working alliance was positively related to total level of disclosure as well as

disclosure in the specific areas of existential concerns, negative affect, and intimacy. Length of time in treatment was also positively related to total level of disclosure.

One limitation of the Farber and Hall (2002) study is that topics that were seldom discussed in therapy, such as violence, were dropped from the analysis due to lack of data. Thus, uncommon topics, some of which may be particularly challenging to disclose in therapy, may not have been represented in the themes included in the analyses. An additional limitation not noted by the authors is that it is unclear the extent to which clients shared negative or distressing information since valence of the disclosure or emotional reactions were not assessed. Perhaps certain variables included in this study (e.g. shame-proneness) relate more to distress level than to disclosure itself, since some disclosures (i.e. disclosure of positive topics) may not elicit shame in a client.

Farber et al. (2004) conducted semi-structured interviews of 21 current psychotherapy clients in order to investigate how clients determine what to conceal versus disclose in therapy. Clients tended to be in long-term treatment, with time in therapy ranging from 15 to 58 months ($M = 22.5$ months, $SD = 14.7$). Participants answered 10 open-ended questions regarding their experiences of disclosing and concealing deeply felt information in therapy as well as 10 Likert-type scale questions regarding emotions experienced immediately following disclosure. Four judges reviewed the open-ended responses and identified common themes and categories.

Participants endorsed mixed emotions and behaviors related to disclosure. Many reported fearing both their therapist's response to the disclosure and their own reactions (Farber et al., 2004). They reported feeling anxious leading up to the disclosure and vulnerable after the disclosure. However, they also reported pride, authenticity, and relief

following a disclosure, and these positive feelings were statistically higher than their negative emotions post-disclosure ($t = 1.59, p < .001$). They also reported receiving affirming reactions from their therapist in response to the disclosure. Furthermore, almost all of the participants stated that they did not regret their disclosures, and most agreed that it is important to disclose, despite its challenges. Despite these assertions, and despite believing that secrets inhibit the therapeutic work, most clients also admitted to currently keeping at least one important issue from their therapist. Thus, participants had a positive attitude towards disclosing, yet struggled to disclose, even after successful disclosures. Although participants believed it was acceptable to not share everything with one's therapist and believed that their therapist did not have expectations of what they should and should not share, most of them also wished that their therapists would sometimes actively inquire about their secrets.

Using the same data set, Farber et al. (2006) identified a sequence of events related to disclosure in psychotherapy. They found that the sequence begins with clients having a positive attitude towards self-disclosure. Next, clients typically feel ambivalent before the disclosure, experiencing a desire to unburden themselves as well as a fear of feeling judged by their therapist or feeling ashamed. Clients tend to feel vulnerable during the disclosure, sometimes experiencing shame or embarrassment. After the disclosure, however, they experience primarily positive emotions, such as relief. They also typically seek out and receive therapist approval and support. Having a positive disclosure experience in therapy increased the likelihood of future disclosures both in therapy and outside of therapy.

Farber et al. (2004, 2006) noted a few limitations to their studies. First, the sample size was small due to the qualitative nature of the study, which makes generalizability difficult. Additionally, most clients were in long-term psychodynamic or integrative psychotherapy and had previous therapy experience, indicating that they may value the process of therapy and specifically, disclosure of personal information as part of the change process. The findings need to be replicated using more clients who are utilizing other types of therapy (e.g. brief treatment, solution-focused treatment). Finally, the researchers did not ask participants about specific disclosure events, but rather, asked about participants' general experiences of disclosing in therapy. Thus, they assessed tendencies or attitudes related to disclosure versus specific disclosure events.

Kahn, Vogel, Schneider, Barr and Herrell (2008) investigated the relationship between amount, valence and emotional intensity of self-disclosure and session depth and smoothness. The researchers hypothesized that disclosure positively relates to session impact variables (i.e. depth and smoothness), which they theorized help set the stage for positive treatment outcome. They analyzed transcripts of three sessions each from 11 undergraduate volunteer clients working with therapist-trainees in a counseling psychology doctoral program. Fourteen undergraduate students and one graduate student identified disclosure events in each transcript, which they defined as "revelation of thoughts, feelings, perceptions, or intentions to which only the speaker would have access" (p. 541) and calculated the percentage of the total session that contained disclosures. They then used The Linguistic Inquiry and Word Count (LIWC; Pennebaker, Francis, & Booth, 2001) computer program to analyze the number of positive (i.e. "happy") and negative (i.e. "nervous") words in each session. Pairs of undergraduate raters viewed

each session and rated session depth and smoothness using the Session Evaluation Questionnaire (SEQ Form 5; Stiles, Gordon, & Lani, 2002), coming to a consensus when there was disagreement in ratings.

The researchers used hierarchical multiple regression analyses, controlling for client symptomatology in each analysis. They found that both total session disclosure and positive-emotion word use was related to greater session depth, $\beta = .46$, $t(29) = 2.40$, $p < .05$ and $\beta = .59$, $t(29) = 3.93$, $p < .001$, respectively, but negative-emotion word use was not related to session depth. Additionally, total disclosure, negative-emotion word use, and positive-emotion word use were unrelated to session smoothness. The researchers concluded that high-disclosure sessions, particularly ones that involve positive emotions, are deeper and higher in impact as compared to those with minimal disclosure.

Limitations of this study include the use of volunteer clients, who might be less symptomatic than clients in psychotherapy, which means the findings may not generalize to a clinical sample. Additionally, the low sample size (11 clients and 6 therapists) indicates a risk that the findings found in the study may not reflect a true effect in the population.

Saypol and Farber (2010) examined the relationship between attachment style and client disclosure in psychotherapy. Participants were 117 current psychotherapy clients who had completed at least three sessions with their current therapist. Most were in long-term psychodynamic therapy ($M = 36.37$ months, $SD = 45.75$). Participants completed online measures assessing general attachment style, attachment to therapist, their level of

disclosure on a variety of topics, and their feelings immediately before and after disclosure.

Level of disclosure was positively correlated with secure attachment to therapist ($r = .30, p < .01$) and strength of attachment to therapist ($r = .47, p < .01$) and negatively correlated with dismissive attachment style ($r = -.30, p < .01$). Disclosure was not correlated with fearful or preoccupied attachment styles. Secure attachment was related to positive emotions after disclosing ($r = .27, p < .01$) and negatively related to negative emotions ($r = -.24, p < .05$) after disclosing. However, secure attachment was unrelated to emotions experienced prior to self-disclosure. Fearful attachment style was positively related to experiencing negative emotions prior to ($r = .28, p < .01$) and following a disclosure ($r = .38, p < .01$). Level of disclosure was not related to gender (client's or therapist's) or attachment style.

Limitations include the high number of therapists (13.7% of sample) and therapists-in-training (13.7% of sample) included in the study. Arguably, these participants understand and value the therapy process in a unique way as compared to non-therapist participants, which may have influenced the findings. Additionally, the researchers did not ask about specific disclosures, but rather, asked about participants' general experience of disclosing in therapy. Thus, they assessed tendencies or attitudes related to disclosure versus specific disclosure events.

Farber et al. (2014) investigated the costs and benefits of encouraging disclosure of traumatic experiences with clients with a history of childhood sexual abuse (CSA). Given that some researchers have found that disclosure of trauma is helpful and healing (e.g. Bonanno, Noll, Putnam, O'Neill, & Trickett, 2003), while others have found that

disclosing a trauma leads to risk of re-traumatization (e.g. Depue, Curran, & Banich, 2006) and that suppressive copers are relatively healthy (Bonanno et al. (2003), the researchers aimed to learn more about both the positive and negative impact of disclosure of abuse in psychotherapy. Participants were 98 female psychotherapy clients who identified as sexual abuse survivors. At the time of participation, they had spent an average of 1.9 years ($SD = 3.0$) in therapy with their current therapist. Forty-four percent were married or in a significant relationship and 56% were single, divorced, or widowed. Participants were recruited via flyers and postings on trauma survivor websites. Upon agreeing to participate, they logged onto a website, where they filled out measures related to childhood sexual abuse and psychological symptoms. They also completed a 23-item questionnaire about their level of disclosure of childhood sexual abuse in psychotherapy. Finally, they filled out a questionnaire regarding how their disclosure in psychotherapy related to the following possible positive and negative outcomes in the following areas: self-awareness, intimacy, validation, differentiation, authenticity, and catharsis. An example of an item from this questionnaire was: “To what extent has self-disclosure in therapy led you to feel less sure of who you are?”

The highest-endorsed positive consequences of disclosing experiences of abuse in therapy were a sense of relief from sharing bottled up emotions ($M = 5.60$; $SD = 2.60$), gaining a better sense of self ($M = 5.40$, $SD = 2.40$), feeling more accepted and understood ($M = 5.30$, $SD = 2.40$), and viewing self as a complex person ($M = 5.20$, $SD = 2.40$). The highest-endorsed negative consequences were feeling overwhelmed by emotions ($M = 5.56$, $SD = 2.10$), feeling uncomfortably vulnerable and exposed ($M = 5.50$, $SD = 2.30$), and feeling anxious about new ways of being in the world ($M = 5.00$,

$SD = 2.20$). Thus, participants endorsed a range of benefits and negative consequences to abuse-related disclosure.

The researchers found that symptomatology was negatively related to perceived benefits of disclosing, $\beta = .33$, $t(90) = 4.57$, $p < .01$, such that participants with higher symptomatology reported fewer benefits from abuse-related disclosure. Symptomatology was also positively related to anxiety following such disclosures, $\beta = .56$, $t(90) = 4.48$, $p < .01$. Additionally, clients who tended to disclose more in general reported more benefits from abuse-related disclosure, $\beta = .69$, $t(90) = 9.46$, $p < .01$, but they also reported more anxiety following such disclosures, $\beta = .33$, $t(90) = 9.46$, $p < .01$. They found that overall disclosure was negatively related to symptomatology, $\beta = -.28$, $t(90) = -2.83$, $p < .01$, such that those with fewer symptoms disclosed more overall than did those with higher levels of mental health symptoms. Thus, it may be that clients who are more disclosing in general and who experience fewer symptoms benefit the most from abuse-related disclosures, whereas those who are highly symptomatic may have a harder time tolerating the discomfort of disclosure and may not benefit as much from disclosing.

One limitation is that Farber et al. (2014) assessed general disclosure tendencies and outcomes rather than the nuance of experiences a client may have depending on the content of an individual disclosure. Additionally, the authors noted that participants self-selected into the study, and most were recruited from websites for CSA survivors, meaning that these participants may have been more motivated to discuss their experiences of abuse than nonresponders. They also noted a need to continue assessing the psychometric properties of the disclosure and CSA scales used.

Han and O'Brien (2014) questioned how client self-disclosure plays a role in psychotherapy in Korea, where cultural norms encourage people to refrain from discussing private thoughts and feelings with authority figures and where values about honoring the family may discourage clients from discussing personal issues. The researchers interviewed 15 Korean individuals (11 women and 4 men) who had completed therapy within the last 18 months. On average, they spent 15 months in counseling ($SD = 17.15$, range = 3 to 72 months). Clients were recruited from university counseling centers, community mental health centers, and private counseling centers in urban cities in South Korea. Using grounded theory methodology, the researchers conducted semi-structured interviews with the participants and came up with themes in the data. The study began with a focus on transformative moments in psychotherapy, and from this more general interview, critical secrets disclosure emerged as an important event in the therapeutic process. Participants were interviewed multiple times if necessary, until the researchers had all the information they needed.

All 15 clients reported having kept secrets. Ten clients reported sharing their secret in psychotherapy and having had a positive experience, two reported sharing their secret and having had an unhelpful experience, and three did not disclose secrets to their therapist. The main finding that emerged is that clients perceived a risk in sharing their secrets, believing that doing so could hurt them. They identified several enabling factors: From the client, a desire to solve problem and improve their life; from the therapist, a safe environment and sharing personal aspects of themselves; from others, encouragement and knowledge about counseling. They also found that clients tested the therapist before disclosing to ensure comfort and trustworthiness. They also identified the

therapist's response as key to determining whether the disclosure was positive. Therapists who responded in a calm, positive manner and helped the client explore more deeply facilitated a positive experience, whereas therapists who responded negatively facilitated a negative experience. Participants reported that after disclosing the secret, they experienced inner change, improved the therapeutic relationship, experienced changes in everyday life, and felt that the real therapy work could begin. Those participants who chose not to disclose their secrets shared that they felt this choice was a limiting factor in their therapeutic experience. Thus, the researchers found that Korean clients did often choose to share important secrets in therapy and often found the experience positive, but they usually did not disclose right away, testing the therapist's trustworthiness first.

The study represents an important first step in studying secret disclosure and concealment in eastern cultures. Limitations of the study are the small sample size, which may not be representative of clients in Korea (and other eastern countries). Additionally, given that the clients were asked by their therapists to participate, these clients may have been more compliant patients (and said yes to please their therapists) than average and may have had more positive views of therapy.

In addition to investigating concealment of secrets in psychotherapy, as reviewed in the previous section, Baumann and Hill (2015) also examined the types of secrets clients disclose, their motivations for disclosing, their feelings about their choice to disclose, and the impact of these decisions on process and outcome factors. They found that 84% of participants ($n = 97$) had disclosed at least one secret to their therapist. Disclosed secrets were most likely to be related to relationships ($n = 45$) or sexual secrets ($n = 37$). Highest-endorsed reasons for disclosing were that participants trusted their

therapist ($n = 79$), thought they would benefit from disclosing ($n = 69$), and thought keeping the secret was preventing progress in therapy ($n = 61$). Clients were most likely to report emotional relief ($n = 73$), insight gains ($n = 72$), and giving the therapist information they need ($n = 60$) as gains received from disclosing.

Participants reported that immediately after disclosing their secret, they experienced comparable levels of positive and negative emotions about the disclosure ($M = 4.00, SD = 1.19$ vs. $M = 3.89, SD = 1.39, t(96) = -.58, p > .05$). This is different from the finding from Farber et al. (2004) that clients felt more positive than negative emotions right after a disclosure. Clients in this study reported that they currently (at the time of taking the survey) felt more positive than negative emotions ($M = 4.51, SD = 1.48$ vs. $M = 2.37, SD = 1.24, t(96) = -9.70, p < .01, d = 1.57$, indicating a large effect). A comparison of feelings at the time of the disclosure (retrospective) versus current feeling about having disclosed showed that clients felt significantly less negative emotion ($M = 3.71, SD = 1.10$ vs. $M = 2.25, SD = .87, t(52) = 7.88, p = .00, d = 1.21$, indicating a large effect) and more positive emotion ($M = 4.11, SD = 1.24$ vs. $M = 3.66, SD = 1.33, t(52) = 2.42, p < .05, d = .35$, indicating a small effect) about their disclosure at the time of taking the survey versus right after disclosing. Thus, it seems that participants initially felt both positive and negative feelings about their disclosure, but that their feelings about the experience grew to be predominantly positive over time. Client ratings of the real relationship, working alliance, and treatment progress were unrelated to disclosure of a secret. Previous researchers found that overall disclosure was related to the therapeutic alliance and to treatment outcome (Farber & Hall, 2002; Farber & Sohn, 2007). One possible reason for the discrepant findings is that these researchers looked specifically at

disclosure of secrets, which may have different predictive ability than looking at overall disclosure.

As mentioned in the previous section, one limitation of this study was the low response rate of participants, with only 3% of therapists contacted about recruiting a client responding to the request. Clients who were reached, either through their therapist or via listserv, self-selected, meaning that those who decided to participate were motivated to discuss their secrets, whereas those clients who were not motivated to discuss secrets would have opted not to participate. Additionally, the researchers assessed only whether or not a disclosure took place. It may be that certain aspects of the disclosure (not just whether it took place) relate to process and outcome variables. A more nuanced look at the qualities of disclosures may provide better understanding of their role in psychotherapy.

Summary. The findings suggest that clients disclose a moderate amount in therapy (Farber & Hall, 2002) and that 84% of clients have disclosed at least one secret in therapy (Baumann & Hill, 2015). When looking at general disclosures, clients are most likely to discuss negative feelings and intimacy issues and least likely to discuss sexuality and procreation issues (Farber & Hall, 2002). When specifically looking at disclosure of secrets, on the other hand, these disclosures tended to be about relationships or sex (Baumann & Hill, 2015). There were no differences between men and women in terms of overall levels of disclosure or disclosure of a secret, but some differences were found in the types of concerns generally disclosed, with women more likely than men to discuss issues surrounding procreation (Baumann & Hill, 2015; Farber & Hall, 2002).

Level of disclosure was found to be positively related to the working alliance, number of sessions, secure attachment, strength of attachment to therapist, session depth, and therapy outcome (Farber & Hall, 2002; Kahn et al., 2008; Saypol & Farber, 2010). Amount of disclosure was negatively related to dismissing attachment style (Saypol & Farber, 2010). There was no relationship between level of disclosure and shame-proneness, guilt-proneness, or session smoothness (Farber & Hall, 2002; Kahn et al., 2008). When looking specifically at disclosure of secrets, there was no relationship with working alliance bond, real relationship, and session progress (Baumann & Hill, 2015), indicating that looking at general disclosure reveals a different picture than does looking specifically at secret disclosure.

Researchers have identified ambivalence, the presence of both negative and positive emotions, as a key factor in the disclosure process (Baumann & Hill, 2015; Farber et al., 2004; Farber et al., 2014; Han & O'Brien, 2014). Clients often feel vulnerable and anxious before and during the disclosure process, knowing that they risk being hurt in the disclosure process (Farber et al., 2006; Han & O'Brien, 2014). Farber et al., (2004) found that clients feel positive right after a successful disclosure, but Farber et al. (2014) and Baumann and Hill (2015) found that clients continued to feel ambivalent even after the disclosure and did not feel distinctly positive about it until some time had passed. Given the presence of negative emotions, it makes sense that clients are apprehensive about disclosing.

Researchers have also identified the importance of a positive response from the therapist after the disclosure, and one study showed that Korean clients test out their therapist to ensure their trustworthiness (Farber et al., 2006; Han & O'Brien, 2014).

Baumann and Hill (2015) found that clients chose to share secrets with their therapists because they deemed them to be trustworthy and because they believed that not disclosing would negatively impact their therapy. Clients also see the value of disclosing difficult personal material in therapy. Clients reported that they experienced insight gains, relief, and gave their therapist important information as the result of sharing (Baumann & Hill, 2015). Farber et al. (2006) found that most clients agreed that although disclosure is uncomfortable, it is important to disclose in therapy, and they did not regret their previous disclosures in therapy.

However, different types of clients may experience self-disclosure differently. Saypol and Farber (2010) found that clients with a secure attachment tended to experience more positive feelings and fewer negative feelings after disclosing as compared to clients with fearful attachment, who were likely to experience negative feelings prior to and following a disclosure. Farber et al. (2014) found that individuals who were generally less self-disclosing and who had more symptoms perceived fewer benefits from disclosing a traumatic event.

Concealment and Disclosure of Secrets Outside of Therapy

Some studies have focused on identifying content categories for secrets concealed outside of psychotherapy. Norton, Feldman, and Tafoya (1974) created a typology for secrets and examined the level of risk associated with having different types of secrets. Undergraduate students in communications classes (N = 359) were each instructed to write down their biggest secret. Judges created seventeen content categories based on the secrets provided: sex (27%), failure (16%), masking (9%), drugs (4%), defective relationships (4%), goals and plans (4%), violence and destruction (4%), physical health

(3%), habits (3%), mental health (2%), ego vanity (2%), loneliness (2%), phobia (2%), stealing (2%), alcohol (2%), cheating (2%), and non-secrets (12%).

The researchers next selected a subset of secrets using 15% of the secrets from each category. A second group of undergraduate students (N = 190) rated the riskiness of disclosing each of these secrets using a 5-point scale ranging from 1 (*extreme low risk*) to 5 (*extreme high risk*). The researcher found that sexual secrets were among those rated most risky.

Limitations of this study include the methodology, which may itself have been perceived risky, given that 12% of the participants submitted responses that were non-secrets. Perhaps assessing secrets in a more private environment versus a classroom would yield different results. Additionally, the study used college students, who may hold different secrets and perceive the riskiness of those secrets differently than those in other stages of life. For instance, college students may have fewer secrets around affairs or health, given that most are not married and are more likely to be healthy than older populations.

Kelly and McKillop (1996) reviewed the literature on concealment and disclosure to identify positive and negative consequences of revealing secrets and provide recommendations on when to disclose. They identified three potential benefits of disclosing secrets: physical and psychological health benefits, decreased rumination/preoccupation, and increased insight/resolution. However, they also identified two possible negative consequences: receiving negative feedback and loss of power or status in certain relationships. They recommended that an individual share a secret if it is

troubling (e.g. causing physical or psychological distress) and if they have a confidante who is trustworthy, nonjudgmental, and can help the secret-holder gain new insight.

Studies have also examined the beneficial aspects of revealing secrets. Kelly et al., (2001) examined the roles of insight and catharsis in assessing the benefits of a disclosure through two related studies. Participants in the first study were 117 undergraduates from an introductory psychology class. Each reflected on the most personal secret they had shared with another person and indicated the extent to which they gained insight and catharsis in revealing the secret. They also rated their feelings at the time of the disclosure as well as their current feelings about their secret. Participants were most likely to have first disclosed to a friend with the same gender identity as the secret-keeper ($n = 70$), and participants who had a less positive reaction after disclosing also felt more negative emotions about their secret ($r = -.22, p < .05$). Additionally, catharsis was related to negative current views about the secret ($r = .19, p < .05$), while insight gains were related to positive current views of the secret ($r = .27, p < .05$). Participants identified the two most important attributes of a confidante as being someone who understands them and who would keep their secret. They rated trustworthiness as significantly more important than attractiveness or expertness in a confidante, though the researchers noted that an expert would be most likely to help someone gain insight into their secret.

Participants in the second study were 98 undergraduate students from an introductory psychology class (Kelly et al., 2001). They completed two 25-minute writing activities over the course of one week and were assigned to one of three conditions: writing about their secrets with a focus on gaining insight, writing about their

secrets with a focus on catharsis, or writing about their previous day (control). The researchers found that participants who wrote with the goal of gaining insight experienced increased positive feelings concerning their secrets ($r = .25, p < .05$), while those who wrote with the goal of catharsis or wrote about their day experienced no changes in affect. Thus, writing with a focus on insight uniquely allowed participants to feel more positive about their secrets.

One limitation of the studies is the use of undergraduate student samples who may hold different types of secrets than other groups and thus, whose responses may not generalize to a wider population. Additionally, the authors noted that it is possible that the act of writing could have provided catharsis for all three groups, which may have allowed those in the insight group to gain both insight and relief related to their secrets (Kelly et al., 2001).

Vrij et al. (2002) investigated aspects of secret keeping and subsequent disclosure among college students. Seventy college students completed measures assessing self-esteem, life satisfaction, and wellbeing, and they answered questions related to one specific secret they were keeping. They completed the same questions four months later and were also asked whether they had disclosed their secret to anyone new as well as their feelings about disclosing.

Forty-one students reported having a secret in round one (Vrij et al., 2002). Total secrecy was rare, with only four participants reporting that they had never disclosed their secret to anyone. Researchers classified the secrets using categories identified by Vangelisti (1994) and found that 14 were related to taboo topics, 18 were conventional secrets, and 2 were related to rule violations (7 were not categorized). Participants had

kept their secrets an average of 28.85 months ($SD = 41.14$ months). Most described their secrets as serious, and 61% reported preoccupation with their secret. Secret holders were motivated primarily by a desire to avoid approval versus intrinsic motivation.

Additionally, participants keeping serious secrets had lower life satisfaction and lower emotional wellbeing than those who did not have a secret. However, participants keeping a not very serious secret had higher self-esteem and greater social wellbeing as compared to those who did not have a secret. Surprisingly, participants keeping a not very serious secret seemed to be the better off than the other two groups.

In the second round, 12 participants reported having disclosed their secret to a new confidante. Predictors of having disclosed included intrinsic motivation for keeping the secret and a belief that their behavior might unintentionally reveal their secret.

One limitation of the study is the use of a college student sample. As mentioned above, the types of secrets kept by college students may be different than those kept by other populations and these secrets may not significantly impact functioning. Thus, replicating this study with a different sample may yield different results. Additionally, given that there were relatively few participants in each category, the authors might not have had enough power to detect associations. Finally, the authors concluded that it was not beneficial to confide in others based on the lack of significant benefits for those who disclosed between rounds one and two versus those who did not. However, the authors also found that total secrecy was uncommon and that most of the participants had told at least one other person about their secret. Thus, perhaps the number of people to which a secret is disclosed matters less than whether it has been disclosed to at least one individual.

Recognizing that shame is a predominant emotion associated with secrets and often a deterrent to disclosing, DeLong and Kahn (2014) investigated whether outcome expectations mediate the relationship between shame and self-disclosure. They focused both on situational shame (shame regarding a specific secret) and dispositional shame (shame-proneness). Participants were 312 undergraduate students (240 women, 71 men, 1 transgender individual) who completed measures online regarding shame related to a specific secret, willingness to seek counseling, shame-proneness, expectations about disclosure, and general disclosure tendencies.

The researchers found that participants reported the most shame and least willingness to disclose regarding secrets related to eating disorders ($n = 31$, $M = 11.03$, $SD = 3.24$ and $M = 15.55$, $SD = 5.12$, respectively), and that they felt the least amount of shame and greatest willingness to disclose regarding secrets related to relationships ($n = 86$, $M = 8.51$, $SD = 3.21$ and $M = 17.23$, $SD = 5.52$ respectively). The researchers found that shame about a specific secret predicted lower anticipated support from a therapist ($r = -.25$, $p < .05$), which in turn predicted less willingness to disclose the secret ($r = .42$, $p < .05$). Additionally, they found that shame-proneness predicted higher anticipated risk in disclosing ($r = .35$, $p < .05$), which in turn predicted a lower tendency to disclose ($r = -.33$, $p < .05$). Thus, they found that both on a trait-level and on a situational level, shame influenced how the participants imagined others would react, which predicted their likelihood of disclosing.

Limitations of this study include the use of college students and self-report measures. Participants were not in psychotherapy and instead imagined their likelihood of

disclosing to a therapist, which may or may not reflect how they would truly behave in psychotherapy.

Summary. In a non-client sample, over half kept secrets, and they did so mainly to avoid disapproval from others (Vrij et al., 2002). Sexual secrets were among the most common secrets kept and also among those considered most risky (Norton et al., 1974). Individuals who experienced shame related to their secret anticipated more negative outcomes from disclosing, which in turn, predicted nondisclosure of their secret (DeLong & Kahn, 2014). The seriousness of a secret mattered, with serious secrets being related to lower self-esteem and physical wellbeing, while not-so-serious secrets were related to higher levels of self-esteem and social wellbeing, suggesting the benefits of keeping small secrets (Vrij et al., 2002).

Disclosing secrets may provide relief, alleviate rumination, help individuals gain insight, and decrease physical and psychological health problems (Kelly & McKillop, 1996). However, there is also risk involved, and disclosing may lead to unhelpful feedback and loss of power in relationships. When considering disclosing a secret, individuals valued a confidante who was trustworthy and understanding (Kelly et al., 2001). Kelly and McKillop (1996) recommended that secrets be disclosed only if they are causing distress and that disclosures be restricted to those who are trustworthy, nonjudgmental, and can help the secret holder gain new insights. Additionally, disclosing secrets for the purpose of gaining insight helped secret holders feel more positive about their secrets, but disclosing secrets for the purpose of catharsis increased negative feelings about their secrets (Kelly et al., 2001). Sharing one's secret with a new

confidante did not appear to have benefits, but most secret-keepers were found to have shared their secret with at least one other person (Vrij et al., 2002).

Theories

Researchers have developed theories to help explain why concealment tends to be related to negative health outcomes and disclosure tends to be related to positive health outcomes. Additionally, some models theorize how individuals make decisions about disclosure.

Preoccupation model. The preoccupation model theorizes that when an individual attempt to suppress unwanted thoughts, the act makes these thoughts overly accessible, leading to increased rumination (Wegner & Erber, 1992; Wegner et al., 1987). For instance, Wegner et al. (1987) found that when participants were told not to think of a white bear, they thought about it almost as much as when they were instructed to actively think about it. According to the preoccupation cycle, the individual engages in thought suppression, an attempt to consciously avoid thinking about the thought (Lane & Wegner, 1995). However, the suppression leads to intrusive thoughts about the secret, which raises the individual's anxiety level, and so they renew their attempts to suppress the thought. This cycle of thought suppression and thought intrusion continues to repeat, causing preoccupation with the thought. Lane & Wegner (1995) theorized that this cycle would only be broken when the individual discloses the secret.

A number of studies provide evidence for the model (Lane & Wegner, 1995; Major & Gramzow, 1999; Smart & Wegner, 1999; Wegner & Erber, 1992; Wegner et al., 1987). For instance, Wegner & Erber (1992) found that attempting to suppress a target word actually increased the number of times the participant gave the target word as a

response in a word association task, as compared to those who were told to concentrate on the word. However, Kelly and Kahn (1994) found that college students were successful in decreasing the intrusiveness of thoughts through suppression. Similarly, Richards and Sillars (2014) identified a group of repressive secret keepers who seemed to be able to successfully suppress their secrets without negative repercussions. Thus, some individuals may have a greater ability to suppress thoughts than others.

Finally, different types of secrets may elicit different levels of preoccupation. Richards and Sillars (2014) theorized that some reasons for keeping a secret (e.g. self-protection) may be more likely to trigger the preoccupation cycle than others (e.g. privacy). Afifi and Caughlin (2006) found that college students experienced greater rumination when a secret was relevant to their identity and when they believed disclosing the secret could damage others' impressions of them. Furthermore, researchers found that thinking about a preoccupying secrets increased cognitive burden, while thinking about a secret that was not preoccupying did not, indicating that secret keeping may primarily be detrimental if the secret is preoccupying (Slepian et al., 2015).

Inhibition theory. Inhibition theory theorizes that bottling up one's thoughts and feelings related to difficult experiences is stressful and ultimately contributes to negative health consequences (Finkenaur & Rimé, 1998; Pennebaker, 1985; Pennebaker, 1997; Pennebaker & Beall, 1986; Pennebaker, Kiecolt-Glaser, & Glaser, 1988; Pennebaker & Susman, 1988). Inhibiting behavior takes mental effort, leading to an increase in activity in the autonomic nervous system. For instance, Pennebaker and Chew (1985) found that research participants experienced a brief elevation in skin conductance levels when they were attempting to mislead the researchers. Inhibition may also contribute to rumination

regarding the event, meaning that concealing a traumatic event may be even more stressful than the event itself (Pennebaker, 1985). Over time, the stress related to long-term inhibition builds up, contributing to stress-related illnesses, such as heart disease and cancer (Derogatis, Abelloff, & Meliseratos, 1979; Pennebaker, 1985). Finkenaur and Rimé (1998) found that keeping a secret about a significant emotional event was related to lower life satisfaction and greater frequency of illness as compared to not keeping this kind of secret.

However, while inhibition is stressful and leads to illness, disclosing thoughts and feelings, either through writing or talking, reduces autonomic activity. For instance, informal interviews with professional polygraphers revealed that when a guilty suspect initially lied and then later told the truth, they experienced a drastic reduction in physiological activity (Pennebaker, 1985). Pennebaker (1985) theorized that expressing thoughts and feelings allows the individual to integrate the difficult memory into their cognitive schema, reducing rumination and stress and increasing wellness. A number of expressive writing studies have demonstrated that writing about a trauma has benefits above and beyond writing about a trivial subject (e.g. Pennebaker, 1997; Pennebaker & Beall, 1986; Pennbaker et al., 1988). For instance, Pennebaker et al. (1988) instructed 50 healthy undergraduate students to write about either a trivial event or a personal traumatic event for four consecutive days. They found that those who had written about a traumatic event had demonstrated increased immune functioning as compared to those who wrote about the insignificant event. A metaanalysis of 13 such expressive writing experiments showed effect sizes ranging from .22 to 2.1 ($M = .47$), indicating that writing about emotional experiences has a moderate effect on health outcomes (Smyth, 1998).

Interestingly, it may not be necessary to write about one's own traumatic event to receive the benefits of expressive writing. Greenberg, Wortman, & Stone (1996) found no difference between writing about a personal traumatic event and a generic traumatic event. This begs the question whether it is the disclosure of a personal event that is helpful or merely the writing process. Alternatively, perhaps writing about a generic event is beneficial because the writer calls up real emotions to address the imaginary topic.

Fever model of disclosure. Stiles (1987) identified two important relationships between self-disclosure and psychological distress. First, he noted that as psychological distress increases, individuals often experience an increased urge to self-disclose to others regarding this distress. He compared self-disclosure to a fever, noting that just as a fever is a sign of underlying infection, self-disclosure is a symptom of underlying psychological distress. Second, he asserted that through disclosure, individuals feel relief from the underlying distress through gaining catharsis and self-understanding (Stiles et al., 1992). Thus, disclosure is both a symptom of distress and a pathway to psychological health.

A number of researchers have found evidence supporting this theory (e.g. Burchill & Stiles, 1988; Jacobson & Anderson, 1982; McDaniel, Stiles, & McGaughey, 1981; Stiles et al. 1992; Rippere, 1977). For instance, Burchill and Stiles (1988) found that undergraduate college students with depression were more disclosing to their roommates than were a control group of students without depression. They also found that the moods of depressed students and their roommates were initially lower as compared to those in the control group, but improved significantly over the course of their conversation. Thus,

depressed students disclosed more than did the nondepressed students, and they felt better after doing so.

Self-presentational perspective. Kelly (2000) questioned whether secret keeping is indeed detrimental, and she theorized that there are benefits to keeping secrets in therapy. She asserted that concealing the less desirable aspects of one's identity from one's therapist allows a client to present themselves in a favorable manner, which prompts the therapist to view the client favorably, and ultimately leads to improvement in the client's self-concept. Kelly (2002) differentiated between one's tendency to self-conceal (as a stable character trait) and the act of keeping a secret, hypothesizing that individuals who tend to self-conceal are also more prone to experiencing psychological and physical distress, but that this is not due to the act of secret keeping itself. Providing evidence for this theory, Kelly (1998), discussed above, found that secret keeping was associated with lower symptomatology, after controlling for self-concealment. Similarly, Kelly and Yip (2006) found that in a nonclinical sample of undergraduate students, self-concealment was associated with a higher level of symptoms at the start and end of the study, and that keeping a secret was related to fewer symptoms.

However, the findings from other studies suggest that concealment is detrimental or has no effect on therapy process and outcome (Baumann & Hill, 2015; Hill, Gelso, & Mohr 2000; Kelly & Yuan, 2009). Hill et al. (2000) agreed that self-presentation is one reason that clients may choose to conceal secrets from their therapists. However, they argued that clients may also conceal for other reasons, including a need for privacy, discomfort related to the imbalance of power in the therapeutic relationship, or a belief that the therapist cannot help them. They also asserted that different motivations for

concealment may differentially impact the therapeutic process. They theorized that particularly when shame is a motivating factor of concealment, choosing to disclose may bring about positive therapeutic change through the therapist's unconditional acceptance of the client. Researchers who interviewed clients on disclosure experiences found that clients view concealment as inhibiting of the therapeutic process and disclosure important to the therapeutic process (Farber et al., 2004; Han & O'Brien, 2014).

Disclosure decision-making models. Several researchers have integrated multiple areas of disclosure research to develop models to explain how individuals decide when and how to self-disclose.

For example, Omarzu (2000) developed the Disclosure Decision Model (DDM) to understand how individuals decide whether or not to disclose personal information to another person. The model starts with identifying one of five goals: social approval, relief from distress, identity clarification, increased intimacy or social control. The next step involves identifying self-disclosure as a means to reach the goal and identifying an appropriate confidante. Step 3 involves deciding how much, how intimately, and how broadly to share. The navigation of these questions begins before and continues during the self-disclosure event and depends on the balance of perceived risk versus reward. The greater the ratio of perceived reward to risk, the more detailed and intimate the disclosure is likely to be.

Greene (2009) developed the Disclosure Decision-Making Model (DDMM) to understand how individuals make health diagnosis disclosure decisions (e.g. early stage cancer diagnosis, HIV diagnosis) in their relationships. In the DDMM, when deciding whether or not to self-disclose, individuals think about: (a) the content of the disclosure,

including potential stigma, symptoms, prognosis, and relevance to others, (b) attributes of the person to whom they would disclose, including relationship quality, anticipated response, and confidence in that response, and (c) their ability to successfully disclose the information and elicit the desired response. When individuals negatively assess their health condition, they will view potential outcomes and disclosure efficacy more negatively. When they perceive a close relationship with the confidante, they will predict more a positive response and have more confidence in that prediction. If a decision is made to disclose, the discloser considers how to convey the message (e.g. timing). Finally, the disclosure episode includes outcomes related to the self, others, and the relationship.

Chaudoir and Fisher (2010) developed the Disclosure Process Model (DPM) to understand the self-disclosure process of individuals with secrets related to concealable stigmatized identity (e.g. sexual identity). Similar to the model outlined by Omarzu (2000), their model begins with the identification of the goals related to disclosure, which they separate into approach-focused goals (e.g. greater intimacy, educating others) and avoidance-focused goal (e.g., prevent social rejection, avoid anxiety). The disclosure event varies in its level of information given and emotional content and includes the reaction of the confidante. Outcomes include individual outcomes (e.g. psychological), dyadic outcomes (e.g. trust), and social contextual (e.g. cultural stigma). Alleviation of inhibition, social support, and changes in social information mediate the relationships between the event and the outcomes.

Summary. Several theories identify the mechanisms through which concealment increases stress and contributes to negative health outcomes. Suppressing thoughts,

behaviors, and feelings related to traumatic experiences leads to stress and eventually illness (e.g. Pennebaker, 1985). The secret keeper struggles to inhibit their distressing thoughts, increasing rumination even when they try to suppress the thoughts (Lane & Wegner, 1995; Pennebaker, 1985). Additionally, a build-up of psychological distress leads to an increased need to self-disclose (Stiles, 1987). When the individual discloses either verbally or through writing, they experience relief and positive physical and psychological health outcomes (e.g. Pennebaker, 1997; Stiles, 1987).

Self-presentational theory offers the alternate view that, while self-concealment may be related to negative health outcomes, keeping secrets is actually beneficial (Kelly, 2000). Specifically, when a client presents as their ideal self in psychotherapy, hiding the aspects of themselves that bring them shame, they are accepted by the therapist, which leads to self-acceptance. Critics of this theory argue that keeping shameful secrets contributes to inauthenticity and assert that a key factor of therapy is for therapists to accept clients as their authentic selves (Hill et al., 2000).

Disclosure decision-making models pull from various theories and research to synthesize an explanation of how individuals make the complex decision of whether to disclose. Key elements of the models include goals, which may include approach-focused and avoidance-focused goals, the disclosure event itself, which includes consideration of how much to share as well as the reaction of the confidante, and outcomes related to the disclosure event (Chaudoir & Fisher, 2010; Greene, 2009; Omarzu, 2000). The models highlight the uncertainty experienced by the discloser when making the decision of whether or not to disclose.

Appendix B: Client Informed Consent Form

Project Title	<i>Maryland Psychotherapy Research Project</i>
Why is this research being done?	<i>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 patients with interpersonal problems.</i>
What will I be asked to do?	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>One week after therapy ends, you will be asked to</i></p>

	<p><i>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.</i></p> <p><i>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.</i></p>
<p>What about confidentiality?</p>	<p><i>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.</i></p>
<p>What are the risks of this research?</p>	<p><i>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.</i></p>
<p>What are the benefits of this</p>	<p><i>This research is not designed to help you personally,</i></p>

research?	<i>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.</i>
Do I have to be in this research? May I stop participating at any time?	<i>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.</i>
Is any medical treatment available if I am injured?	<i>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.</i>
What if I have questions?	<i>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 <i>This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.</i></i>

<p>Statement of Age of Subject and Consent [Please note: Parental consent always needed for minors.]</p>	<p><i>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.</i></p>	
<p>Signature and Date <i>[Please add name, signature, and date lines to the final page of your consent form]</i></p>	<p>NAME OF SUBJECT</p>	
	<p>SIGNATURE OF SUBJECT</p>	
	<p>DATE</p>	

Appendix C: Therapist Informed Consent Form

Project Title	<i>Maryland Psychotherapy Research Project</i>
Why is this research being done?	<i>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 patients seeking psychotherapy for interpersonal concerns. The purpose of this research project is to investigate different therapeutic interventions so that we can enhance psychotherapy for patients with interpersonal problems.</i>
What will I be asked to do?	<i>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</i>

	<p><i>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.</i></p>
<p>What about confidentiality?</p>	<p><i>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.</i></p>
<p>What are the risks of this research?</p>	<p><i>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.</i></p>
<p>What are the benefits of this research?</p>	<p><i>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.</i></p>

<p>Do I have to be in this research? May I stop participating at any time?</p>	<p><i>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 patients 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.</i></p>	
<p>Is any medical treatment available if I am injured?</p>	<p><i>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.</i></p>	
<p>What if I have questions?</p>	<p><i>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</i></p> <p><i>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</i></p> <p><i>This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.</i></p>	
<p>Statement of Age of Subject and Consent [Please note: Parental consent always needed for minors.]</p>	<p><i>Your signature indicates that:</i></p> <ul style="list-style-type: none"> <i>you are at least 18 years of age;</i> <i>the research has been explained to you;</i> <i>your questions have been fully answered; and</i> <i>you freely and voluntarily choose to participate in this research project.</i> 	
<p>Signature and Date [Please add name, signature,</p>	<p>NAME OF SUBJECT</p>	

<i>and date lines to the final page of your consent form]</i>	SIGNATURE OF SUBJECT	
	DATE	

Appendix D: Client Demographics Form

1. Date: _____

2. Age: _____

3. Sex: Male Female

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

Appendix E: Therapist Demographics Form

1. Date: _____

2. Age: _____

3. Sex: Male Female

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: _____

7. Previous counseling experience: _____ # of years providing counseling

Appendix F: Secret Disclosure Measure

Secrets are defined as life experiences, personal facts, thoughts, or feelings that you intentionally do not disclose to most people. In therapy, clients often choose to tell some of their secrets to their therapists and to not tell them other secrets.

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

1. Did you disclose (i.e. reveal) a secret to your therapist in this session? ___ Yes
___ No

If yes, please complete questions 2- 9.

2. When in the session did the disclosure take place?

_____ Right at the beginning

_____ Near the beginning

_____ Middle

_____ Toward the end

_____ At the end

3. In one word, please say what the disclosure was about (e.g. sex, relationship, work).

4. How distressed were you by the secret, prior to sharing?

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

5. How significant (i.e. salient, important, meaningful) did you find the secret, prior to sharing?

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

6. How much have you thought about the secret in the past week?

0	1	2	3
4			
Not at all	Occasionally	Fairly	Very
Constantly			
		Frequently	Frequently

7. How difficult (i.e. painful, distressing, shameful) was it for you to share the secret?

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

8. How do you feel about having shared your secret?

Very negative

Neutral

Very positive

I-----I

9. How has your disclosure changed the way your therapist views you, if at all?

Appendix G: Secret Concealment Measure

Secrets are defined as life experiences, personal facts, thoughts, or feelings that you intentionally do not disclose to most people. In therapy, clients often choose to tell some of their secrets to their therapists and to not tell them other secrets.

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

1. Did you choose to keep a secret from your therapist in this session? Please note that you will not be asked to share your secret if you select "yes." ___ Yes ___ No

If yes, please complete items 2- 4.

2. How distressing do you find this secret?

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

3. How significant (i.e. salient, important, meaningful) do you find the secret?

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

4. How much have you thought about the secret in the past week?

0	1	2	3
4			
Not at all	Occasionally	Fairly	Very
Constantly			
		Frequently	Frequently

Appendix H: Working Alliance Inventory- Short Revised—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	Seldom	Never

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	Seldom	Never

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

5	4	3	2	1
Always	Very Often	Fairly Often	Seldom	Never

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	Seldom	Never

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	Seldom	Never

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	Seldom	Never

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

Appendix I: Working Alliance Inventory- Short Revised—Therapist

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	Seldom	Never

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 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	Seldom	Never

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

5	4	3	2	1
Always	Very Often	Fairly Often	Seldom	Never

7. I appreciate ___ as a person.

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

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

5	4	3	2	1
Always	Very Often	Fairly Often	Seldom	Never

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	Seldom	Never

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	Seldom	Never

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

Appendix J: Real Relationship Inventory-Client Form

On the next several items, please use the scale to evaluate your perceptions of yourself, your therapist, and your relationship with your therapist.

1. My therapist liked the "real me."

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

2. I was open and honest with my therapist.

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

3. My therapist seemed genuinely connected to me.

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

4. My therapist was holding back his/her genuine self.

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

5. I appreciated my therapist's limitations and strengths.

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

6. We do not really know each other realistically.

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

7. My therapist and I were able to be authentic in our relationship.

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

8. My therapist and I expressed a deep and genuine caring for one another.

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

9. I had a realistic understanding of my therapist as a person.

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

10. My therapist did not see me as I really am.

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

11. I felt there was significant holding back in our relationship.

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

12. My therapist's perceptions of me were accurate.

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

Appendix K: Real Relationship Inventory-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.

1. My client and I are able to be genuine in our relationship.

5	4	3	2	1
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
2. My client feels liking for the “real me.”

5	4	3	2	1
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
3. I feel there is a “real” relationship between us aside from the professional relationship.

5	4	3	2	1
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
4. My client and I are honest in our relationship.

5	4	3	2	1
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5. My client holds back significant parts on him/herself.

5	4	3	2	1
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
6. There is no genuinely positive connection between us.

5	4	3	2	1
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
7. My client’s feelings toward me seem to fit who I am as a person.

5	4	3	2	1
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
8. I do not like my client as a person.

5	4	3	2	1
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
9. It is difficult for me to express what I truly feel about my client.

5	4	3	2	1
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
10. My client has unrealistic perceptions of me.

5	4	3	2	1
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
11. My client and I have difficulty accepting each other as we really are.

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

12. My client shares with me the most vulnerable parts of him/herself.

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

Appendix L: Session Evaluation Scale—Client

Instructions: Indicate how much each statement reflects your experiences in your most recent helping session. Please note that term helper can refer to a therapist, counselor, or any other person in the helping role. *Circle one number for each item using the following scale:*

	Strongly Disagree			Strongly Agree
1. I am glad I attended this session.....	1	2	3	4 5
*2. I did <u>not</u> feel satisfied with what I got out of this session.....	1	2	3	4 5
3. I thought that this session was helpful.....	1	2	3	4 5
*4. I did <u>not</u> 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 M: Session Evaluation Scale—Therapist

Instructions: Indicate how much each statement reflects your experiences in your most recent helping session. Please note that term helper can refer to a therapist, counselor, or any other person in the helping role. *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 <u>not</u> 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 <u>not</u> 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 N: Self-Concealment Scale

Please indicate the extent of your agreement with each of the following statements using the scale below:

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

- ___ 1. I have an important secret that I have not shared with anyone.
- ___ 2. If I shared all my secrets with my friends, they'd like me less.
- ___ 3. There are lots of things about me that I keep to myself.
- ___ 4. Some of my secrets have really tormented me.
- ___ 5. When something bad happens to me, I tend to keep it to myself.
- ___ 6. I'm afraid I'll reveal something I don't want to.
- ___ 7. Telling a secret often backfires and I wish I hadn't told it.
- ___ 8. I have a secret so private that I would lie if anybody asked me about it.
- ___ 9. My secrets are too embarrassing to share with others.
- ___ 10. I have negative thoughts about myself that I never share with anyone.

Appendix O: Outcome Questionnaire 45.2

The Outcome Questionnaire 45.2 is protected by copyright. Several sample items are included below. For more information about obtaining a copy of the OQ 45.2, please go to www.OQMeasures.com.

Sample Items:

1. I feel lonely.
2. I have trouble getting along with friends and close acquaintances.
3. I have trouble falling asleep or staying asleep.
4. I feel that I am not doing well at work/school.

9. I utilize Cognitive or Behavioral methods.

Never Always

10. I identify myself as Family Systems in orientation.

Not at all Completely

11. I conceptualize my clients from a Family Systems perspective.

Never Always

12. I utilize Family Systems methods.

Never Always

13. I identify myself as Feminist in orientation.

Not at all Completely

14. I conceptualize my clients from a Feminist perspective.

Never Always

15. I utilize Feminist therapy techniques.

Never Always

16. I identify myself as Multicultural in orientation.

Not at all Completely

17. I conceptualize my clients from a Multicultural perspective.

Never Always

18. I utilize Multicultural methods.

Never Always

Appendix Q: Post-Therapy Interview

7. Did you share any significant secrets while in therapy?
 - a. What impact did it have on your experience in therapy?
8. Do you still have some secrets that you never told your therapist?
 - b. How do you feel to have ended therapy without having shared these secrets?
11. What was the impact of the research on you?

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