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PERSONALITY PROCESSES AND INDIVIDUAL DIFFERENCES

Living Into the Story: Agency and Coherence in a Longitudinal Study of Narrative Identity Development and Mental Health Over the Course of Psychotherapy

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Narrative identity is the internalized, evolving story of the self that each person crafts to provide his or her life with a sense of purpose and unity. A proliferation of empirical research studies focused on narrative identity have explored its relationship with psychological well-being. The present study is the first prospective, multiwave longitudinal investigation to examine short-term personality change via an emphasis on narrative identity as it relates to mental health. Forty-seven adults wrote rich personal narratives prior to beginning psychotherapy and after every session over 12 assessment points while concurrently completing a measure of mental health. Narratives were coded for the themes of agency and coherence, which capture the dual aims of narrative identity: purpose and unity. By applying in- depth thematic coding to the stories of participants, the present study produced 47 case studies of intraindividual personality development and mental health. By employing multilevel modeling with the entire set of nearly 600 narratives, the present study also identified robust trends of individual differences in narrative changes as they related to improvements in mental health. Results indicated that, across participants, the theme of agency, but not coherence, increased over the course of time. In addition, increases in agency were related to improvements in participants' mental health. Finally, lagged growth curve models revealed that changes in the theme of agency occurred prior to the associated improvements in mental health. This finding remained consistent across a variety of individual-difference variables including demographics, personality traits, and ego development.

Keywords: narrative identity, identity development, agency, coherence, psychotherapy

Narrative identity is the internalized, evolving story of the self that each person crafts to provide his or her life with a sense of purpose and unity (e.g., Hammack, 2008; McAdams, 1996, McAdams, 2001; McAdams & Olson, 2010; McAdams & Pals, 2006; McLean, Pasupathi, & Pals, 2007; J. A. Singer, 2004). It represents a layer of personality that is distinct from broad dispositional traits and contextualized characteristic adaptations (e.g., McAdams, 1995; McAdams & Pals, 2006). In recent decades, a proliferation of psychological research on narrative identity has provided a strong empirical basis for the construct, cutting across the field, including personality psychology (e.g., Bauer, McAdams, & Sakaeda, 2005; King & Hicks, 2006; Lodi-Smith, Geise, Roberts, & Robins, 2009; McLean & Fournier, 2008; McLean et al., 2007; Pals, 2006; Pasupathi, 2001; Woike & Polo, 2001), social psychology (Baumeister & Newman, 1994; Murray & Holmes, 1994; Pennebaker, 2000; Sternberg, 1995), developmental and life-span psychology (e.g., Bluck & Glück, 2004; Bohlmeijer, Roemer, Cuijpers, & Smit, 2007; Fivush & Sales, 2006; Habermas & Bluck, 2000; McLean & Pratt, 2006; Pasupathi & Mansour, 2006; Staudinger, 2001; Thorne, 2000), cognitive psychology (e.g., Alea & Bluck, 2003; Conway & Pleydell-Pearce, 2000; Pillemer, Ivcevic, Gooze, & Collins, 2007; J. A. Singer & Salovey, 1993), cultural psychology (e.g., Hammack, 2008; Rosenwald & Ochberg, 1992; Thorne, 2004), and clinical and counseling psy- chology (e.g., Adler, Chin, Kolisetty, & Oltmanns, in press; Adler, Skalina, & McAdams, 2008; Angus & McLeod, 2004; Baddeley & Singer, 2010; Gruber & Kring, 2008; Hayes, Beevers, Feldman, Laurenceau, & Perlman, 2005; Hayes et al., 2007; Lysaker, Davis, Hunter, Nees, & Wickett, 2005; J. A. Singer, 2005). Narrative identity has been investigated as it emerges in adolescence (e.g., Habermas & Bluck, 2000), supports generativity in adulthood (e.g., McAdams, 2006b), and fosters meaning making at the end of life (e.g., Bohlmeijer et al., 2007; Staudinger, 2001). It has been linked to important outcomes as diverse as political ideology (e.g., McAdams et al., 2008), love (Sternberg, 1995), volunteerism (Cox & McAdams, in press), morality (Frimer, Walker, Dunlop, Lee, & Riches, 2011), meaning making (e.g., King & Hicks, 2006), and self-esteem (McLean, Breen, & Fournier, 2010).

Many studies of narrative identity have

specifically examined individual differences in personal stories as they relate to mental health and psychological well-being (e.g., Adler, Kissel, & McAdams, 2006; Baerger & McAdams, 1999; Bauer et al., 2005; Fivush & Sales, 2006; Gruber & Kring, 2008; Lilgendahl & McAdams, 2011; Lysaker & Lysaker, 2006; McAdams, Reynolds, Lewis, Patten, & Bowman, 2001; McLeod, 1997; Roe, 2001; J. A. Singer, 2004). Of special interest to researchers focused on the relationship between variability in personal stories and psychological well-being are the particular ways in which people narrate experiences of change. Indeed, change experiences offer researchers an opportunity to examine the ways in which people make sense of their own development. Consequently, psychologists have studied a wide variety of change narratives, including stories of religious conversions and career shifts (Bauer & McAdams, 2004), the coming-out process in gay men and lesbians (King & Smith, 2004), divorce (King & Raspin, 2004), bereavement (Baddeley & Singer, 2010), the college years (Lodi-Smith et al., 2009; McAdams et al., 2006), the discovery that one is to give birth to a baby with Down's syndrome (e.g., King, Scollon, Ramsey, & Williams, 2000), and experiences in psychotherapy (e.g., Adler & McAdams, 2007a; Adler et al., 2008).

In striving to examine changes in personality as they relate to psychological well-being, psychotherapy offers a particularly fruitful focus for researchers. A significant proportion of the general population seeks psychotherapy (e.g., in the National Comorbidity Survey Replication study, roughly 18% of participants reported using mental health services in just the past 12 months; Kessler et al., 2005; Wang et al., 2005), presenting researchers with the opportunity to assess a diverse sample undergoing this significant change experience. Indeed, whereas a wide variety of problems bring people into treatment, psychotherapy represents a predictable episode when people with a broad range of circumstances reliably experience significant change. Furthermore, stories about psychotherapy show up often and spontaneously in complete life-story accounts, and when they do, narrators tend to refer to these experiences as episodes of important personality development (e.g., Lieblich, 2004). Finally, previous researchers have not simply been interested in stories of career shifts or becoming the parent of a Down's syndrome baby or the college years solely in the service of explaining these specific life events; rather, these events are vehicles for exposing the salient relationships between different strategies of narrating change and people's mental health. Instead of focusing on one specific experience or period in the life course, studying psychotherapy allows for a window into all sorts of life transitions, all of which are united by their fundamental emphasis on personal growth and change. It therefore presents an opportunity for researchers interested in studying change more broadly to examine an experience wherein people with diverse circumstances are likely to undergo such change.

The present study represents a novel, intensive examination of short-term personality change via an emphasis on narrative identity as it relates to mental health. This prospective, longitudinal study tracked the coevolution of narrative identity and mental health on a week-by-week basis as a group of 47 participants underwent the significant change experience of psychotherapy. By applying in-depth thematic and structural coding to the frequently collected personal stories of participants, the present study produced 47 case studies of intraindividual personality development and mental health. By employing multilevel modeling to the entire set of nearly 600 narratives, the present study also identified robust trends of individual differences in narrative changes as they relate to improvements in mental health. In doing so, the present study is grounded in two primary questions that support more specific hypotheses. First, how do people's personal narratives evolve over the course of a significant change experience (psychotherapy); what are the thematic and structural shifts that characterize this identity development? The present study identified key themes that do and do not reliably change over the course of psychotherapy. Second, what is the temporal relationship between changes in narrative identity and changes in mental health over this period, or which comes first, feeling better or telling a new story? The present study tested two temporal sequences of changes to determine the relationship between narrative change and shifts in mental health.

Purpose and Unity: The Dual Aims of Narrative Identity for Mental Health

The theory of narrative identity posits that, beginning in adolescence, individuals construct an internalized and evolving story about their life experiences that weaves together their reconstructed past, perceived present, and anticipated future (e.g., McAdams, 1996, 2001). Constructing a narrative identity serves two primary psychological functions: First, it provides the self with a sense of purpose and meaning; second, it provides the self with a sense of unity across time and situations (McAdams, 1996, 2001). Both aims have important implications for mental health.

Personal narratives explain what a life means to the person living it; they reveal the ways in which the individual makes sense out of his or her experiences. Narrative identity is characterized by a variety of elements that point toward meaning; chief among them is the thematic content. McAdams, Hoffman, Mansfield, and Day (1996) suggested that agency is one of the central superordinate thematic clusters in life narratives. This

dominant thematic element represents a narrative instantiation of one the major psychological forces that shape human life (e.g., Bakan, 1966; Bandura, 2006; Deci & Ryan, 2000; Frimer et al., 2011; McLeod, 1997; Woike & Polo, 2001). The theme of agency is concerned with the individual's autonomy, achievement, mastery, and ability to influence the course of his or her life; it is therefore strongly connected to the individual's sense of meaning and purpose. Research focused on the theme of agency has identified its strong association with psychological well-being (e.g., Adler et al., in press; Helgeson, 1994; McAdams et al, 1996; Woike & Polo, 2001). Although agency is not the only way of assessing the meaning function of narratives, the unique ways in which a person's sense of purpose is thematically instantiated in his or her narrative identity via the theme of agency have important implications for mental health.

Similarly, the extent to which narrative identity is successful in providing the self with a sense of unity also relates to mental health. The theory of narrative identity suggests that selves must be integrated across time—the me of the past must be seen to coherently evolve into the me of the present and the imagined future me. This unifying function is referred to as diachronic integration (e.g., Adler & McAdams, 2007c) or temporal coherence (e.g., Habermas & Bluck, 2000). However, the matter of narrative co-herence extends beyond the temporal domain. Psychologically sufficient personal narratives also need to exhibit causal coherence, the linking of life's events to one's developing sense of self (e.g., Pals, 2006); thematic coherence, evaluative or reflective connections between episodes in the story (e.g., Habermas & Bluck, 2000); and draw from a cultural concept of biography (e.g., Habermas, 2007) or master narratives outlining the typical and expected course of a life within the person's cultural context (e.g., Hammack, 2008). Narratives that achieve these four elements provide a deep sense of integration for the individual, and high levels of narrative coherence correlate with a variety of positive psychological outcomes (e.g., Adler, Wagner, & McAdams, 2007; Baerger & McAdams, 1999). In recent years, the goal of unity has been hotly debated by theorists interested in narrative identity (e.g., Freeman, 2010; Hyvarinen, Hyden, Saarenheimo, & Tamboukou, 2010; McAdams, 2006a). Nevertheless, the little empirical evidence that has been collected suggests that individuals who are able to find some unity in their sense of self are psychologically better off than those who cannot find this coherence (e.g., Adler et al., 2007; Baerger & McAdams, 1999; Lysaker et al., 2005). Although coherence is not the only way of assessing the unifying function of narratives, the ways in which an individual structures his or her narrative do have important implications for mental health.

Empirical Research on Narrating Change and Mental Health

By their very nature, change experiences pose a challenge to both the purpose and the unity aims of narrative identity. When an individual undergoes a change, he or she must work to make sense of the transition, connecting the self from before the change to the self after the change. This process can lead one to flirt with meaninglessness and incoherence, as components of the self are cast off and reshaped (e.g., King & Hicks, 2007). The vast majority of research in this area has focused on the relationship between stories of change and mental health in retrospective accounts (e.g., Adler et al., 2006; Adler & Poulin, 2009; Bauer & McAdams, 2004; Bauer et al., 2005; King & Raspin, 2004; King et al., 2000; King & Smith, 2004; Philippe, Koestner, Beaulieu-Pelletier, & Lecours, in press). Yet two recent longitudinal investigations significantly advanced the evidence base concerning narratives of change and mental health (Bauer & McAdams, 2010; Lodi-Smith et al., 2009). In both, the authors assessed development in narrative identity over the course of the college years and identified key shifts in the narratives that were associated with improvements in mental health. Importantly, in each study, the relationship between changes in the narratives and changes in mental health remained significant after statistically controlling for shifts in personality traits.

The studies presented above are meant both to highlight the growing interest in the relationship between narratives of change and mental health and to demonstrate the current methodological and analytical approaches to this important topic. Without a doubt, the empirical literature demonstrates that different strategies of 369 narrating personal change relate differentially to mental health, both cross-sectionally and longitudinally, and points to the incremental validity of narratives in their association with valued outcomes above and beyond other components of personality. Nevertheless, work in this area has tended to emphasize a somewhat oversimplified approach to the study of change. With its heavy emphasis on college-student samples (at least in the longitudinal research) and single or two time-point assessments, the dynamic nature of narrative identity development and its unfolding relationship with mental health have not been explored in an especially nuanced fashion. The present study aims to significantly advance this body of research through multiwave assessments of adults undergoing an important change experience.

Research on Psychotherapy as an Arena of Narrative Change

There is a voluminous theoretical and empirical literature on change over the course of psychotherapy (e.g., Kazdin, 2007; Lambert & Ogles, 2004). Yet the

field of research that has specifically focused on changes in clients' personal narratives is dominated by qualitative and small-scale, cross-sectional quantitative studies. The prevailing conclusion from this body of research points to the centrality of common factors (those likely to be found in almost any approach to psychotherapy, such as the therapeutic alliance, the uniqueness of the therapeutic setting, the opportunity to talk about oneself, etc.) in clients' narratives (e.g., Elliott, 2008; Hermans, 2006; McLeod, 1997). This group of findings points to the salience of the psychotherapeutic experience in people's developing sense of themselves and has identified a broad set of themes that tend to characterize the stories they construct about these episodes. The accumulated evidence supports the notion that therapy stories provide an ideal window into understanding identity change and that the study of these stories is best served by a focus on the factors of treatment that transcend specific therapeutic orientations.

Five small-scale longitudinal studies stand out for their sophisticated manner of tracking narrative changes alongside improvements in mental health (Foa, Molnar, & Cashman, 1995; Hayes et al., 2005, 2007; Lysaker et al., 2005; van Minnen, Wessel, Dijkstra, & Roelofs, 2002). These studies represent the only empirical investigations of narrative change and clinical improvement over the course of psychotherapy that employed more than two assessment points in samples larger than a handful of participants. In each of these studies, a small group of participants (N = 14 –29) repeatedly wrote personal stories while undergoing a psychosocial intervention. The findings that emerged from this collection of studies point toward the importance of narrative coherence (Foa et al., 1995; Lysaker et al., 2005; van Minnen et al., 2002) and the extent to which the narrator adopts an active role in processing his or her experience (Hayes et al., 2005, 2007), similar to the construct of agency. Yet, by emphasizing one particular treatment intervention or by focusing on a very specific client population, these studies make generalizing from each of them difficult. The present study sought to address these limitations while also including a significantly larger sample size and incorporating more frequent assessments of both narrative identity and mental health.

Personological Context

In addition to the primary focus on narrative identity development over the course of psychotherapy, the present study also strived to contextualize its central emphasis within a broader personological inquiry (e.g., Alexander, 1988; McAdams, 2003; J. A. Singer, 2005). McAdams (1995, 2001) suggested that personality is best understood as comprising three levels. At the first level, dispositional traits provide the foundational signature of personality, those qualities that are fairly stable across the life span and from situation to situation. The Big Five traits, a dominant focus of much of personality psychology (e.g., John & Srivastava, 1999), nicely capture this first level. While personality traits would not typically be expected to change significantly over the course of a roughly 14-week period—the average period of participation in the present study—previous research has consistently found that certain trait scores might be elevated during episodes of psychopathology (e.g., Costa, Bagby, Herbst, & McCrae, 2005), and some studies have observed shifts in traits over the course of psychotherapy independent of changes in psychopathology (e.g., Bagby et al., 1995; Santor, Bagby, & Joffe, 1997).

At the second level of personality, which McAdams (1995, 2001) labeled characteristic adaptations, are the components of personality that are contextualized within time, place, and social role. These developmental and motivational aspects of personality capture the individual's major personal concerns. One characteristic adaptation that has received significant attention in research on narrative identity is the construct of ego development, or the nuance and complexity with which an individual makes meaning out of his or her experience (e.g., Hy & Loevinger, 1996; Loevinger, 1976). A measure of ego development was included in the present study for two reasons. First, differing stages of ego development may impact changes in narratives over time. For example, Adler and colleagues (2007) found that individuals at higher stages of ego development told more coherent stories about their experiences in psychotherapy than their peers at lower stages of ego development, even accounting for the impact of personality traits. Second, ego development may itself represent an outcome of interest worth investigating, one independent of psychological well-being. A large body of empirical literature has indicated that ego development and psychological well-being are orthogonal constructs (e.g., Bauer & McAdams, 2004; King & Raspin, 2004; King et al., 2000; King & Smith, 2004), and it is therefore possible that therapy may independently enhance clients' stage of ego development.

Narrative identity represents McAdams's (1995, 2001) third level of personality and serves as the primary focus of the present study. As described above, the theory of narrative identity suggests that the approach individuals use in making meaning of their experiences naturally takes a narrative form, providing the self with a sense of purpose and integrating the self across time and situations. The matter of what, exactly, constitutes a narrative (as opposed to other forms of thought and communication) is far from settled and has been discussed at length by philosophers and social and cognitive scientists alike (e.g., Bruner, 1986; Cohler, 1982; Freeman, 2010; Gergen, 1991; Josselson & Lieblich, 1993; Labov, 1972; Mandler,

1984; McAdams, 2006a; McLeod, 1997; Polkinghorne, 1988; Ricoeur, 1984; Sarbin, 1986). Providing a definitive conclusion to that debate is far beyond the scope of the present article. Nevertheless, the broad body of theory and empirical research seems to converge on the idea that narratives are composed of structured reconstructions of events that describe characters and their shifting intentions over the course of time. Epistemologically, narratives have very different aims than do rational arguments, striving to richly capture the human experience, as opposed to making absolute truth claims (e.g., Adler, in press). In the present study, the set of stories that were collected aspires to this definitional benchmark of narrative. As is discussed below, some certainly fall short, but the majority clearly conforms to standards embraced by the tradition of empirical research on narrative identity. By focusing on the study of change in narrative identity while also investigating changes in personality traits and the characteristic adaptation of ego development, the present study aims to present a truly personological inquiry (e.g., Alexander, 1988; McAdams, 2003; J. A. Singer, 2005).

Summary and Hypotheses

Building upon the body of research on narrative identity development in response to change experiences, as well as the small group of studies on narrative change over the course of psychotherapy specifically, the present study seeks to provide evidence documenting the unfolding coevolution of narrative identity and mental health. As described above, the primary theoretical questions shaping the present study are: how do people's personal narratives evolve over the course of a significant change experience, and what is the temporal relationship between changes in narrative identity and changes in mental health? As two chief elements tapping the primary goals of personal narratives—and two with empirical support for their centrality to psychotherapy narratives (e.g., Foa et al., 1995; Hayes et al., 2005, 2007; Lysaker et al., 2005; van Minnen et al., 2002)—agency and coherence are of primary relevance to the present investigation. The present study was designed to address the following specific hypotheses concerning narrative change and mental health in the context of psychotherapy:

Hypothesis 1: It was hypothesized that the narrative themes of agency and coherence would increase over the course of psychotherapy.

Hypothesis 2: It was hypothesized that there would be significant positive relationships between the narrative themes of agency and coherence and mental health over the course of psychotherapy.

Hypothesis 3: Both theory and empirical research findings are truly silent as to the likely direction of these changes — whether narrative identity or mental health ought to change first. As a result, no specific hypotheses have been developed pertaining to the temporal relationship of these shifts. However, the question of temporal ordering is absolutely fundamental to the present inquiry; in the absence of experimental manipulations, determining the temporal sequencing of changes is the closest the present study can come to explaining the predictive relationship between narrative change and mental health. Thus, models exploring the temporal precedence of changes in mental health and the temporal precedence of changes in narrative identity both are tested.

Hypothesis 4: The temporal relationships between the narrative themes and mental health are assessed in light of other personality variables to determine whether narratives possess incremental validity in their association with mental health above and beyond the impact of these other personality variables. Shifts in the Big Five personality traits and the characteristic adaptation of ego development themselves over the course of psychotherapy are first explored. Then, the coevolution of narrative identity and mental health is assessed in comparison to observed changes in personality traits, traditionally robust and stable predictors of mental health, and ego development, a construct that has been examined in relationship to narrative identity development that taps the complexity of meaning-making processes.

Hypothesis 5: The temporal relationships between the narrative themes and mental health are assessed in light of individual differences in participants and their therapists, reflecting the tradition of assessing client and therapist variables in research on psychotherapy process and outcome (e.g., Beutler et al., 2004; Clarkin & Levy, 2004).

Method

Participants

Participants were recruited as part of the standard intake procedures at a major outpatient mental health clinic with several locations around Chicago, IL, that conducts nearly 60,000 therapy sessions annually. As a component of the standard intake interview, prospective clients were asked if they were interested in learning about opportunities to participate in research, in addition to receiving clinical services. Participants were eligible if they were 18 years or older and requested individual psychotherapy (as opposed to couples or family treatment). There were no other exclusion criteria. A total of 55 eligible clients who indicated interest in

participating in research had the study described to them over the phone when initial contact was made with the clinic.[1] Of these, two declined to participate; no information was obtained on their reasons for declining participation. Of the 53 participants who signed consent forms, 47 (89%) completed at least three therapy sessions and narratives and were therefore included in the final sample.[2] Snijders and Bosker (1999) indicate that sample sizes of over 30 participants can be considered large for the purposes of multilevel modeling, the primary analytic strategy in the present study. Demographic characteristics of the sample are presented in Table 1. The sample was 70% female, which is similar to the proportion found in the general treatment-seeking population (e.g., Wang et al., 2005). The sample was also roughly 70% Caucasian, which is slightly higher than the proportion found in the general treatment-seeking population (e.g., Wang et al., 2005). Participants' average age was roughly 36 years, and their levels of education and income were moderate (education, M = some college; income, M = $21,000 – $40,000 per year). Participants reported a wide range of prior history of psychotherapy, from first-time treatment seeking to beginning with a new therapist after many years in prior treatment. Results indicated that history of psychotherapy was not a significant individual-difference variable impacting the results. Participants did not provide information describing their reasons for seeking treatment, yet therapists were asked to comment on this when clients completed participation in the study. Therapists indicated that participants sought treatment for a wide spectrum of issues, ranging from problems in life (divorce, anticipating having a child, etc.) to significant psychopathology (depression, anxiety disorders, eating disorders, etc.). No specific reason for seeking treatment was endorsed by a significant enough subset of the sample to warrant separate analyses.

Therapists

Thirty-two therapists worked with clients enrolled in the present study. Every therapist working at the clinic was invited to participate in the study. Therapists' participation was voluntary, and they did not receive any compensation for working with clients enrolled in the study. Demographic characteristics of the therapists are presented in Table 1. The sample of therapists was 84% female, which is somewhat high compared to the general population of practicing psychotherapists (e.g., Michalski, Mulvey, & Kohout, 2010). The sample of therapists was also 75% Caucasian but did include therapists from a range of racial backgrounds, making it more racially diverse than the general population of practicing psychotherapists (e.g., Michalski et al., 2010). As the clinic is a teaching facility, 50% of the sample of therapists was drawn from students currently enrolled in graduate programs (doctoral program in clinical psychology, master's in counseling, master's in marital and family therapy). However, the other 50% were staff therapists with higher level degrees, including senior, doctoral-level clinicians. The therapists employed a range of theoretical orientations in their work with the specific clients enrolled in this study, with roughly 37% reporting use of cognitive– behavioral techniques, 25% reporting use of psychodynamic treatment, and the remainder reporting use of integrative or other approaches with the specific clients enrolled in this study.

[TABLE 1]

Materials

Participants completed three self-report measures.

Mental health: The Systemic Therapy Inventory of Change questionnaire. The Systemic Therapy Inventory of Change (STIC) is a self-report questionnaire designed to measure change in mental health in the individual, relationship, current family, and child-rearing domains (Pinsof & Chambers, 2009; Pinsof, Zinbarg, & Knobloch-Fedders, 2008; Pinsof et al., 2009). It is the first and only measure specifically designed to bring a multisystemic perspective to the study of client change in individual therapy (Pinsof et al., 2009). For the purposes of the present study, mental health data were drawn primarily from the total score on the STIC subscale labeled Individual Problems and Strengths (IPS). This 24-item subscale, designed to measure participants' overall individual mental health, has shown adequate convergent validity with widely used measures of depression and anxiety (Pinsof et al., 2009). On the IPS subscale, participants respond to questions such as "In the past week I felt tense or anxious" (reverse-scored) along 5-point scales ranging from 1 (Not at All) to 5 (All of the Time), where higher scores indicate more positive mental health. In addition to tapping distress, the STIC also includes items that assess other aspects of mental health such as self-esteem ("I am comfortable with who I am") and self-awareness ("I don't understand why I do the things I do," reverse-scored). The STIC items are unlikely

1 It is unknown how many prospective clients who were asked about their interest in participating in research when they contacted the clinic declined the offer.

2 Insufficient data were collected on the six participants who did not complete at least three therapy sessions to determine if they differed in any significant way from the rest of the sample. Participants' specific reasons for discontinuing participation (such as sufficient resolution of the problem, poor fit with the therapist, logistical or financial issues, etc.) before completing all 12 assessment points were not obtained.

to contain substantial content overlap with the narrative theme of agency. Participants completed the STIC prior to their first session of psychotherapy and after each session for the first 12 sessions; the total score on the IPS subscale (IPS total) at each assessment point served as the primary index of mental health.

Personality, traits: Big Five Inventory. The Big Five Inventory (BFI) is a 44-item, widely used, adjective checklist designed to measure each of the five traits commonly subsumed under the Big Five framework of personality (John & Srivastava, 1999): Neuroticism, Extraversion, Conscientiousness, Agreeableness, and Openness to Experience. Participants completed the BFI before their first session of psychotherapy and before their final (12th) session of psychotherapy as part of participation in this study. To identify true trends, more than two assessment points would be required (e.g., Fraley & Roberts, 2005), but the inclusion of these two assessments of personality traits does permit for a preliminary investigation of trait change.

Personality, characteristic adaptations: Washington University Sentence Completion Test of Ego Development. Ego development has been conceptualized as the degree of complexity an individual uses in making meaning from his or her experiences (e.g., Loevinger, 1976).[3] The Washington University Sentence Completion Test of Ego Development (SCT; Hy & Loevinger, 1996; Loevinger, 1976) is considered the gold standard for measuring ego development and has served as the primary instrument by which it has traditionally been assessed (e.g., Westenberg & Block, 1993). The SCT asks participants to complete 18 sentence stems (e.g., "When I am criticized... ," "Rules are..."). Each item is scored by reliable coders according to established guidelines (Hy & Loevinger, 1996), aggregated, and assigned a total protocol rating. The ego development scoring guidelines have shown high levels of reliability and internal consistency (Hy & Loevinger, 1996). In the present study, one coder, trained to good interrater reliability with the SCT scoring manual (κ = .82), scored all SCTs. The inclusion of an additional coder would have enhanced the robustness of any findings pertaining to ego development, and this is therefore a limitation that must impact the interpretation of results pertaining to this construct. However, there is significant precedent for the use of one coder trained to reliability with the scoring manual (e.g., Adler et al., 2007; Bauer & McAdams, 2004, 2010). Participants completed the SCT before their first session of psychotherapy and before their 12th session of psychotherapy as part of participation in this study.

Personality, narratives. Participants wrote narratives about their therapy and its impact on their sense of self. Before the first session of psychotherapy participants wrote a narrative in response to the following probe:

> Please write at least 2–3 paragraphs describing your thoughts and feelings about beginning therapy. We are interested in how you are thinking about therapy, its potential impact on you, and how these thoughts and feelings about therapy will change over the course of time. Examples of what you might write about could include: how you are feeling about beginning therapy, an account of how you expect therapy to help you, and how you see the therapy fitting into your overall life or sense of self.

After each additional session of psychotherapy for the duration of this study, participants wrote a narrative in response to the following probe:

> Please write at least 2–3 paragraphs describing how you feel your therapy is affecting you this week. Please do not give a re-cap of your most recent session. Instead, we are interested in how you are thinking about your therapy, its impact on you, and how these thoughts and feelings about therapy are changing over the course of time. Examples of what you might write about could include: how you are feeling about being in therapy, an account of the parts of therapy that are helping or not helping, and how you see the therapy fitting into your overall life or sense of self.

These two probes were designed based on previous research on psychotherapy narratives and sought to align with other work on clients' perspectives on their treatment (e.g., Adler & McAdams, 2007a; Adler et al., 2008; Gershefski, Arnkoff, Glass, & Elkin, 1996; Hayes et al., 2005, 2007; Levy, Glass, Arnkoff, & Gershefski, 1996). As such, their likelihood of viably eliciting codable narratives about the therapeutic experience was prioritized. While each probe does explicitly encourage the participant to reflect on how therapy fits into his or her sense of self, the specific probes may elicit responses that fall short of the gold standard for identity narratives. Indeed, the probes do not guarantee that every response will be truly narrative in nature or deeply concerned with identity. Nevertheless, as described below, the majority of responses did adhere to standards of assessing narrative identity.

All narratives were returned in sealed envelopes. Therapists never had access to their clients' narratives, and clients were informed that whatever they wrote would

3 It is worth noting that ego development has been shown to have only weak to moderate correlations with verbal intelligence (Westenberg & Block, 1993).

be kept confidential from their therapists.

Procedures

Every participant was eligible to remain in the study through 12 assessment points. The number of assessment points was selected based on previous research indicating that the majority of psychotherapy clients exhibit some improvement over this period of time (e.g., Howard, Kopta, Krause, & Orlinsky, 1986). Participants were compensated for each assessment point, whether they provided complete data or not (information that remained masked until after participation concluded). Participants received $20 for the first and 12th assessment points and $10 for the second through 11th assessment points, for a maximum possible compensation of $140. Compensation was overseen by administrative staff at the clinic; therapists were never involved. As displayed in Table 1, the mean number of sessions was roughly 10, and the mean number of days in treatment during the study was 103 (just over 14 weeks).

Prior to first session of psychotherapy. If consent to participate was obtained, participants were mailed a packet of materials that included the consent form, the STIC, the BFI, the SCT, 373 and the initial narrative. Participants were asked to complete these measures and bring them to their first session of psychotherapy. If participants arrived for their first session of therapy with the forms incomplete, they were given time to complete them in the waiting room prior to meeting their therapist for the first session (therapists reported that this happened very few times).

Following Psychotherapy Sessions 1–11. Before the second session and for every subsequent session of treatment up to Session 11, participants were asked to complete the STIC. In addition, participants were asked to write narratives after each session. They were not instructed to complete the two tasks in any specific order, and it is as likely that, in practice, the STIC was completed before the narrative as in the reverse order.

Following Psychotherapy Session 12. If participants were still in treatment at Session 12, following this session they again completed the STIC, wrote a narrative, and completed the BFI and SCT. Following the completion of this assessment battery, participation in the present study concluded, although participants and their therapists made a decision about whether treatment would continue. After the 12th assessment, therapists also completed a brief questionnaire, reporting on various aspects of their treatment with participants, including demographics, their theoretical approach to working with this specific client, and their diagnostic assessment of the client.

Coding of Narratives

Masking procedures. An extensive masking procedure was implemented to prevent narratives from being identified as belonging to a particular participant or coming from a certain assessment point. Before any narratives were collected, a study identification number was assigned to all hypothetical participants. Then, a random number generator was used to assign identification numbers to every hypothetical narrative that might be obtained in the course of the study. When each narrative was collected, a research assistant who was not involved in subsequent coding deidentified it using the list of pregenerated random study identification numbers and digitally transcribed it, safeguarding against the potential for matching handwriting samples. Narratives were never seen by coders with anything other than their randomly assigned study identification number and in typewritten, transcribed form. This meant that it was virtually impossible for coders to guess which participant generated a given narrative (as nearly 600 narratives were coded, it was impossible to keep track of any similar content while coding) or to specifically place a given narrative within the string of assessment points.

Coding procedure overview. Narratives were coded for two themes central to narrative identity: agency and coherence. Coding was conducted by two raters who achieved adequate reliability with each coding system (reliability coefficients are reported with the descriptions of each coding system below). For all narratives, coding was conducted by theme; in other words, every narrative was first coded for agency, then, once all narratives had been coded for agency, every narrative was coded for each of the four dimensions of coherence. This meant that each narrative received five separate readings throughout the coding process: once for agency and once for each of the four dimensions of coherence. Again, as there were nearly 600 narratives obtained, this meant that there were nearly 3,000 narrative codes assigned. What follows are descriptions of the coding systems that were used. Quotations from participants illustrating the coding systems appear in Table 2.

Agency. Narratives high in agency are fundamentally concerned with the self-sufficiency of the protagonist. Highly agentic narratives describe protagonists who can affect their own lives, initiate changes on their own, and achieve some degree of control over the course of their experiences (e.g., Adler et al., 2008; Bandura, 2006; Deci & Ryan, 2000; Frimer et al., 2011; McAdams et al., 1996). This theme is related to the degree to which people internalize their actions, reflect on them, and engage in them with a full sense of choice (e.g., Bandura, 2006; Deci & Ryan, 2000). A narrative coding system was developed for operationalizing the theme of agency in psychotherapy narratives, drawing on several existing coding systems (e.g., McAdams, 2002). This

coding system has been used in one previous study of therapy narratives (Adler et al., 2008) with good interrater reliability (intraclass correlation [ICC] between two raters in that study was 0.80). It is a 5-point coding system, where an entire narrative is assigned a single score. In the first example displayed in Table 2, the narrator describes feeling a lack of control over her problems ("my life continues to unravel") and her recovery ("therapy [is] the only thing that's keeping me together"). In contrast, in the second example displayed in Table 2, the narrator conveys his transformation from previously being dominated by the challenges in his life to feeling confidently in control of his current issues. Agency was coded by two raters, with excellent interrater reliability (ICC = .93).[4]

Coherence. Coherence is a foundational criterion for evaluating successful stories. Surveying a range of theories regarding narrative coherence, Baerger and McAdams (1999) developed a coding system for assessing the degree of coherence in life-story accounts along four dimensions, described below. In the past, this coding system has been used specifically with narratives of psychotherapy (Adler et al., 2007, 2008) and was adopted for the present study as well. Using this system, each narrative receives a score from 0 (low coherence) to 3 (high coherence) on each of the four indices, and then, an average is computed to represent overall coherence.

The orientation index of coherence assesses the degree to which the narrative provides the reader with sufficient background information to understand the story. It taps the extent to which the participant places this story within the context of his or her ongoing story of self. Orientation was coded by two raters, with excellent interrater reliability (ICC = .84). In the first example in Table 2, the narrator provides no context for the insightful comments she goes on to make. She simply starts, "I have times now," without orienting the reader to any specific time, thus receiving a low score on orientation. In contrast, in the second example in Table 2, the narrator provides excellent detail about the setting for the narrative that follows. There are specific facts that orient the reader, and the general thematic thrust of the narrative is established.

The structure index of coherence assesses the extent to which the narrative adopts a logical flow of scenes that are presented in a causally and temporally logical way. Structure was coded by two raters, with excellent interrater reliability (ICC = .84). In the first example displayed in Table 2, the narrator displays poor structure by jumping from topic to topic without making the connections between them clear. The first few sentences center on the challenges of seeking treatment, but the later ones cover several seemingly unrelated issues. In general, the flow is hard to follow. It is difficult to provide an example of a section narrative that was especially strong in structure without providing an entire, lengthy narrative (see Adler et al., 2007, for a more thorough example), yet the second example in Table 2 attempts to portray this feature. In this example, the narrator provides several rhetorical signposts that indicate where she is in the thrust of the story. Phrases such as "on the one hand," "but on the other hand," and "so, to conclude" help the audience identify the clear flow of the reflection the narrator is offering.

The affect index of coherence assesses the extent to which the narrative makes an evaluative point. This index captures the narrator's use of emotional language to underscore why this particular story is worth telling. Affect was coded by two raters, with excellent interrater reliability (ICC = .84). In the first example displayed in Table 2, the narrator describes an upcoming "major transition," her mother moving in with her, without offering any affective language to alert the reader as to how she feels about this change. She does display some self-reflection, noting that she is committed to enforcing limits, but even this statement is offered without any emotional content to underscore its significance to her. It therefore scored low on the affect dimension of coherence. In the 375 second example displayed in Table 2, there are several emotion words— excitement, trepidation, sadness, depression—that alert the reader to the importance of this particular story. The narrative is about the beginning of treatment, and the narrator uses affect words to underscore the significance of this occasion.

Finally, the integration index of coherence captures the extent to which the narrator relates the episode being described to his or her larger sense of self. Integration was coded by two raters, with excellent interrater reliability (ICC = .87). In the first example displayed in Table 2, the narrator clearly conveys the magnitude of the events of her past week, but she offers no reflection on what these events say about her or how they fit into her sense of herself. In contrast, in the second example displayed in Table 2, the narrator reflects on the ways in which the work she is doing in therapy have allowed her to reconceptualize her approach to selfcare and, in doing so, relates the content of her treatment back to her larger sense of self. This narrative therefore scored high on the integration dimension of coherence.

As in previous research (i.e., Adler et al., 2007), the four dimensions of coherence were highly intercorrelated, and a composite coherence score, representing the mean of a participant's score on each of the four dimensions, was created and used to represent the overall coherence of the narrative.

Word count. The length of a given

4 In all instances, ICCs represent ICC Case 2, Type 1 (Shrout & Fleiss, 1979), and the interpretation of the magnitude of these values follows the guidelines presented by Cicchetti (1994).

psychotherapy narrative has seldom been observed to show significant association with the narrative variables of interest in the present study (e.g., Adler, et al., 2007, 2008). Nonetheless, the word count of each narrative was recorded so that it could be statistically controlled in relevant analyses. After narratives were transcribed, the Word Count function in Microsoft Word was used to determine the length of the narrative (M = 239 words, SD = 83 words).

Results

Descriptive and Preliminary Analyses

Zero-order correlations among narrative, mental health, and personality variables, collapsing across all participants and across all assessment points, are presented in Table 3. The narrative themes of agency and coherence were not significantly correlated (r = .08, p = . 51). Agency was significantly correlated with clients' overall mental health in the predicted direction (r = .29, p ❍ .01). It is also worth noting that narrative coherence was significantly correlated with clients' ego development (r = .25, p ❍ .05), replicating results reported elsewhere (Adler et al., 2007). Finally, the Big Five personality traits were intercorrelated in patterns that reflect previous findings (e.g., John & Srivastava, 1999; Krueger, Caspi, Moffitt, Silva, & McGee, 1996). These zero-order correlational results simply provide a gross overview of the primary relationships between narrative, traits, ego development, and mental health variables and do not directly illuminate the primary hypotheses of the present study. However, they suggest that across participants and across sessions, the various constructs under investigation did show the expected relationships.

It is worth noting that the length of the narratives, as indexed by their word count, was not significantly correlated with the themes of agency or coherence, replicating previous findings (e.g., Adler et al., 2007, 2008). Word count was significantly positively correlated with ego development (r = .14, p ❍ .05). This contradicts previous findings with regard to this association (Adler et al., 2007) and needs to be replicated before it can be adequately interpreted.

Growth Curve Analyses

To assess intraindividual change in narrative variables and mental health, as well as average change across participants in these variables, conventional growth curve analyses were employed for testing each of the primary hypotheses in the present study. This technique is a form of multilevel modeling that involves the application of hierarchical linear models (e.g., Bryk & Raudenbush, 1987; Raudenbush, Bryk, Cheong, Congdon, & du Toit, 2004; J. D. Singer & Willett, 2003; Tasca & Gallop, 2009). Such multilevel modeling techniques offer considerable advantages over other analytic techniques (e.g., J. D. Singer & Willett, 2003; Tasca & Gallop, 2009). One advantage of growth curve analysis is its ability to account for missing data, participants with differing numbers of assessment points, and uneven spacing in the data-collection schedule, collectively referred to as "unbalanced data" (J. D. Singer & Willett, 2003, p. 146). Because the present study assessed narrative change in a naturalistic treatment setting, the data set is characterized by such irregularities, and it was therefore vital to have an analytic strategy that could accommodate such unbalanced data. In each analysis, unless specifically stated otherwise, the passage of time was counted in number of days elapsed since the first assessment point. In the present study, analyses nesting participants within therapists were not conducted because there were too few instances of such nesting. HLM6 statistical software (Raudenbush et al., 2004) was used to conduct all multilevel modeling analyses.

Testing Hypothesis 1: Do Narrative Themes Increase Across Assessment Points?

Growth curve models were constructed to assess the changes in the narrative themes of agency and coherence over the 12 assessment points. Results of these models appear in Table 4. Model 1 represents changes in agency over time, and Model 2 represents changes in coherence over time. The coefficients of Model 1 suggest that, for the typical participant, agency increased across assessment points. The coefficients of Model 2 suggest that, for the typical participant, their score on coherence did not significantly change over the course of treatment. In other words, contrary to the hypothesis, across participants, narratives did not show significant increases or decreases in coherence over time. This finding indicates that there was no consistent pattern of change in the overall coherence of participants' narratives over the course of treatment. It is possible that certain participants did experience increases in coherence, as hypothesized, while others showed no shifts or even decreases. Subsequent models run independently on each of the four dimensions of coherence suggested that the only dimension to show even a marginally significant shift over the course of time was the integration dimension, β_{01}=6.87, t(46)=3.47, p=.064. This indicates that participants showed marginally significant increases in the extent to which their narratives connected the specific episode recounted in the individual narrative to their greater sense of self. In light of the marginal significance of this result, the high intercorrelation of integration with the other three dimensions of coherence, and the

precedent for assessing coherence using an average score across the four dimensions (e.g., Adler et al., 2007; Baerger & McAdams, 1999), no further analyses were conducting using the individual dimensions of coherence.

Testing Hypothesis 2: Do Narrative Themes Relate to Mental Health Across Assessment Points?

Having established an increase in agency, but not coherence, over the course of 12 assessment points, it was now possible to test whether this increase was associated with mental health. Before doing so, it was necessary to test whether mental health itself increased over the course of psychotherapy. As presented in Table 4, Model 3 suggests that mental health did improve over the course of treatment, as would be expected (e.g., Kazdin, 2007; Lambert & Ogles, 2004).

In testing the relationship between the narrative themes and mental health over the course of psychotherapy, it was essential to account for the passage of time in the statistical models. Regression to the mean is a common complicating factor in assessing therapeutic change (e.g., Lambert & Ogles, 2004), and it was therefore important to accommodate such naturalistic change when assessing for narrative change. The results of Model 4 represent the association between change in the narrative theme of agency and mental health over the course of 12 assessment points, accounting for the impact of the passage of time, counted in number of days since the first assessment point. This model, displayed in Table 4, suggests that the passage of time was indeed associated with improvements in mental health. However, even accounting for the impact of this variable, changes in the theme of agency were significantly positively associated with improvements in mental health over 12 assessment points.

Testing Hypothesis 3: Assessing the Temporal Relationships Between Changes in Narratives and Changes in Mental Health

To test the temporal relationships between changes in clients' narratives and changes in their mental health, a series of models was constructed using lagged analyses (J. D. Singer & Willett, 2003). J. D. Singer and Willett (2003) described the practice of lagged modeling as a method for confronting issues of state dependence and reciprocal causation. In the present study, it is possible that participants' narrative themes may have been state dependent on their mental health at the time of writing (or vice versa). While lagged models cannot determine the causal pathways in longitudinal relationships (additional experimental controls would be necessary to reach those conclusions), they can confirm the directions of associations. By lagging predictor variables, such models allow for the demonstration of temporal precedence. J. D. Singer and Willett advised making decisions about the construction of lagged variables based on theory. However, since there is no empirical precedent to guide the specific hypotheses of the present study, there was no theoretical rationale for predicting a particular direction of association. In other words, there was no theoretical justification to suggest whether temporal changes in one type of variable (e.g., mental health) should precede changes in another type of variable (e.g., agency). Theory was also silent as to the specific amount of lagging (any specific number of days or number of assessment points) to use in the construction of the various models. As a result, each of the directional models described below was constructed twice, using a lag of one therapy session in the first iteration and a lag of two therapy sessions in a second iteration as an exploratory assessment method.

First, the association between changes in mental health and subsequent changes in agency was assessed using lagged models. The results of these models are presented in Table 5. Models 5 and 6 assessed the relationship between changes in mental health and subsequent changes in the theme of agency at lags of one and two sessions, respectively. The coefficients of these models suggest that there was no significant relationship between changes in mental health and subsequent changes in agency. Models 7 and 8, also displayed in Table 5, assess the converse association: testing whether changes in the theme of agency temporally preceded subsequent changes in mental health, lagged one (Model 7) and two (Model 8) sessions. The results of these models indicate that there was a significant positive relationship between changes in the narratives and subsequent changes in mental health, both one and two sessions later. In other words, the models indicate that the theme of agency in participants' narratives increased prior to associated increases in mental health.

Testing Hypothesis 4: Assessing the Impact of Other Personality Variables on the Temporal Relationships Between Changes in Narratives and Changes in Mental Health

Two additional types of personality variables were assessed in this study: the Big Five traits and ego development. Thus, it was possible to explore the relative contributions of these other personality variables to changes in narratives and in mental health. First, paired-samples t tests were run to determine whether personality traits and ego development changed significantly from the assessment prior to treatment versus the assessment collected after 12 sessions. Results indicated that trait neuroticism showed a significant decrease over the course of treatment, $t(46)=-3.00$, $p<.01$. None of the other

personality traits showed significant changes. Ego development showed a marginally significant increase over the course of treatment, t(46)=1.85, p=.07.

Two initial models were tested to assess the relationships between changes in these additional personality variables and changes in mental health. The results of these two models are reported in Table 6. Model 9 assessed the relationship between changes in neuroticism and improvement in mental health. Shifts in neuroticism and shifts in mental health were observed in the expected direction (e.g., Krueger et al., 1996). Model 10 assessed the relationship between changes in ego development and changes in mental health. No significant relationship was identified. This was not surprising in light of previous research documenting the relative independence of ego development and psychological wellbeing (e.g., Bauer & McAdams, 2004; King et al., 2000).

In light of the findings represented in these models, it was possible to test models that assessed the relative contribution of changes in the theme of agency to subsequent changes in mental health above and beyond that of the other personality variables. Two additional models were tested, predicting lagged changes in mental health from shifts in the theme of agency, alongside changes in trait neuroticism and ego development. These models (Models 11 and 12) are presented in Table 6. The coefficients in each of these models demonstrate that after accounting statistically for the effects of neuroticism and ego development, changes in agency remained significantly associated with subsequent changes in mental health at a lag of one session over the course of treatment.

In addition to these models, two further models were constructed using Time 1 neuroticism and Time 1 ego development as Level 2 variables. In other words, these multilevel models assessed whether the observed relationship between changes in agency and subsequent changes in mental health varied across participants who were higher versus lower in neuroticism and ego development at Time 1. The results of the first model indicated that neuroticism was a significant Level 2 variable: The association between increases in agency and subsequent improvements in mental health was stronger for participants with lower Time 1 scores on neuroticism, β_{01} = - 5.64, $t(46)$ = - 4.78, p < .05. However, it is important to note that Time 1 mental health was a nonsignificant Level 2 variable, β_{01} = - 0.62, $t(46)$ = -0.10, p = .18, indicating that the significant result for Time 1 neuroticism cannot be attributed solely to mental health status. The results of the second model indicated that ego development was not a significant Level 2 predictor: The association between increases in agency and subsequent increases in mental health did not differ between participants with higher or lower Time 1 scores on ego development, β_{01} = - 0.12, $t(46)$ = 0.91, p = .37.

Additional Analyses: Assessing the Impact of Client and Therapist Variables

In addition to the tests of the primary hypotheses, it was possible to construct models with a second level using demographic variables. These models assessed whether the observed results were consistent across different types of participants. The results are presented in terms of variation in client variables and variation in therapist variables, two common dimensions along which psychotherapy process and outcome studies are assessed (e.g., Beutler et al., 2004; Clarkin & Levy, 2004).

Client variables are those that describe any meaningful difference in clients that might impact the process and/or outcome of treatment (e.g., Clarkin & Levy, 2004). To test the impact of client variables, a series of models was constructed identical to Model 7 above (testing the relationship between changes in agency and subsequent changes in mental health at a lag of one session). None of the client variables were significant in their impact on the slope of these models: sex, β_{01} = -4.00, t(46) = -1.85, p = .09; race, β_{01} = 0.01, t(46) = 0.01, p = .99; education, β_{01} = -0.17, t(46) = -0.28, p = .79; income, β_{01} = 0.08, t(46) = 0.10, p = .92; and history of prior psychotherapy, β_{01} = -0.35, t(46) = -0.60, p = .55. This indicates that the relationship between increases in agency and subsequent improvements in mental health over the course of treatment was consistent across clients with varying backgrounds.

Therapist variables are both observable and subjective differences in therapists that might impact the process or success of treatment (e.g., Beutler et al., 2004). To test the impact of therapist variables, a series of models was constructed identical to Model 7 above (testing the relationship between changes in agency and subsequent changes in mental health at a lag of one session). Of the 379 therapist variables, only sex had a significant impact on the relationship between changes in agency and subsequent changes in mental health, with the relationship being significantly stronger among those clients with female therapists, β_{01} = -5.52, t(46) = -2.26, p ❍ .05. However, this finding should be interpreted with caution, as nearly 85% of the participating therapists were female (see Table 1). It is therefore possible that the poor performance of one or two male therapists may be driving this result. Indeed, there is no theoretical basis on which to assume that female therapists might better support the association between increases in agency and subsequent improvements in mental health. The impact of therapist age was also marginally significant, β_{01} = 0.25, t(46) = 1.77, p = .09, indicating that there was a trend toward the relationship between changes in agency and subsequent changes in mental health being stronger among those

clients with older therapists. None of the other therapist variables had significant impacts on slope: race, β_{01} = -0.20, t(46) = -0.20, p = .85; therapist degree, β_{01} = -0.81, t(46) = -0.65, p = .52; and client fee, β_{01} = 0.02, t(46) = 1.15, p = .26.

Three additional multilevel models were constructed to test the potential impact of therapist-reported therapeutic orientation. There were a sufficient number of cases where the therapist reported using either a cognitive– behavioral, psychodynamic, or integrative approach to assess the impact of these three orientations on the relationship between changes in agency and subsequent changes in mental health (see Table 1). Again, the initial model was the same as Model 7, above. At Level 2, dummy-coded variables for theoretical orientation were added. There were no significant differences in the relationship between changes in agency and subsequent changes in mental health for any of the three theoretical orientations tested: cognitive–behavioral, β_{01} = 0.30, t(46) = 0.13, p = .90; psychodynamic, β_{01} = 2.00, t(46) = 0.67, p = .51; and integrative, β_{01} = 0.62, t(46) = 0.29, p = .77. Thus, the finding that changes in agency observed in clients' narratives preceded improvements in their mental health was not found to differ according to the therapist's theoretical orientation.

Illustration of Results: A Case Example

This study is grounded in the rich personal narratives of its participants. In essence, it represents 47 case studies of psychotherapeutic change and its association with mental health. As a result, a brief case example drawn from the sample serves to illustrate the primary results. It is important to note that the above findings are based on aggregate data—the results of the growth curve models necessarily collapse across participants, and the specific numerical outputs do not correspond to any one individual's scores. Nevertheless, one participant's unique experience gives life to the general trends.

Sandy[5] was one of the youngest participants in the current study sample. Just 18 years old (the minimum cutoff score for age), she began her first course of individual therapy for depression and eating disorder symptoms, having previously participated in brief and unsuccessful family and group therapy experiences in her earlier teens. Prior to her first session, Sandy was feeling particularly low. In her initial narrative she wrote,

> I'm 18 and I'm already messed up enough to have been in 3 different kinds of counseling?! How did I let that happen to myself?!?! I guess I'm a little disappointed in myself that as a person who always thought of herself as strong-willed and independent, I have sunk low enough to depend so much on other people.

In this excerpt, Sandy conveyed her negative self-assessment in language that explicitly highlights her poor sense of agency. She noted that she had always conceived of herself as a "strong-willed and independent" person but now found herself dependent on others. This disempowering fall was particularly disappointing to Sandy; she suggested that her old self might have been able to cope with her rising problems. This contrast and her specific language choice in describing it resulted in Sandy's first narrative receiving a very low score on agency.6 Sandy's mental health prior to initiating treatment was also quite poor, as indicated by her first assessment on the STIC.

A few sessions later, Sandy was deep in the work of treatment. She and her therapist had formulated a plan for how they would address some of her primary problems, and the therapeutic alliance had begun to solidify. Yet Sandy remained conflicted about the work of therapy. She reflected,

> Trying to develop a treatment plan is a daunting task and thinking about it too much is discouraging because suddenly it seems like nothing can really be done about these issues. On the other hand, at least there's some sort of tangible goal against which I can measure how I am and into which I can throw myself. I've never tried to have goals for my health before but I think this will be good for me, or at the very least it'll be an interesting exercise. I am a little worried that the only really attainable goals won't actually be that helpful to me whereas the places I really need to make serious changes will remain the same. And the fear in that is twofold. Not only will I not be better but I'll also feel like a failure for not having achieved my goals. Better to be without direction and thus never go the wrong way than to fail and be able to tell, especially when there are other people watching you.

In this passage, taken from Sandy's fourth narrative, she presented her internal struggle with the therapy. She saw the potential benefits of the treatment plan, specifically the utility of externally defined markers of her progress. Yet she lamented that the change this plan could facilitate would only be on the surface and that "the places [she] really need[ed] to make serious change will remain the

5 Certain potentially identifying details, including the name, have been modified in this case example to protect confidentiality.

same." She framed this as a feared threat to her agency—a second failure and an embarrassment, compounding her shame around being in treatment. Indeed, while Sandy's narrative showed a mild increase in her agency (demonstrated by her shared initiative in developing the treatment plan and language like "I can throw myself"), her mental health scores remained low.

In the subsequent narrative, written 10 days later, Sandy began to notice the potential for change. Specifically, she started to distinguish her feelings about her mood problems and her feelings about being in treatment. After dissecting the most salient moments of her past week and the role of therapy in influencing those, she wrote,

> ...Back to the first thought I had, about therapy being a relief. That's definitely a change. Because I'm feeling pretty down about a lot of things and yet the thought of going to therapy isn't being brought down by that attitude, which is a difference, I think. It seems that up to now my mood about life ran parallel to my mood about therapy. If I can continue to make these two lines of thought diverge, I'll find that very encouraging.

Sandy suggested that her conceptualization of treatment represented a distinct story line in her personal narrative, one that might have a unique relationship with her overall mental health. Specifically, she saw the potential for taking an active role in separating the "lines of thought" and noted that beginning to think differently about therapy might ultimately impact her overall mood. This narrative displayed a slightly enhanced degree of agency—Sandy framed herself as in control of the direction of her thinking. Her mood had not shown significant shifts, but her story about the therapy evidenced compelling change.

In her eighth narrative, Sandy's writing revealed an interesting paradox. She continued to struggle to successfully implement much of her therapeutic work, yet she had begun to locate the source of her potential for improvement squarely within her own power. She wrote,

> I'm taking good things out of being in therapy but I'm not always able to apply those to my real life and real behaviors. Sometimes I feel like I can have healthier conversations or interactions or relationships with people but often I see things going exactly the same way as before and I see myself unable to break out of those cycles despite my commitment to therapy and despite the fact that I really am taking what I'm learning to heart and working at it. Perhaps I could excuse myself if I thought wasn't being respected or understood in therapy but I certainly don't feel that way. So the problem must be that I'm not trying hard enough.

There are several instances of agentic language in this passage: Sandy noted that she was actively "taking good things out of being in therapy" (as opposed to choosing a passive verb such as receiving or being given), she described how hard she was "working at it," and most notably, she resolved that any lack of real-life progress must be due to her "not trying hard enough." Throughout, Sandy made it clear that she was responsible for her own improvement. Thus, although her mental health scores had risen quite a bit after 7 weeks of treatment, her narrative construction of the therapy had shifted entirely in the direction of being more agentic; Sandy now regarded herself as the agent for change in her treatment.

The general trend in both Sandy's mental health and her agentic narrative constructions was upward from this point on. She experienced a brief decline in agency in her third-to-last narrative, writing,

> I feel like I'm wobbling on the edge of numbness that doesn't seem to make sense alongside the heightened awareness and the paying more attention to my therapeutic goals, etc. It may well be, however, that the impact therapy is having is in pointing out how numb I am a lot of the time, and the fact that I can recognize and work to change that is a big step forward.

Her use of the passive phrase "the impact therapy is having," as opposed to a more agentic construction such as "the impact I am creating," represented a step backward. Yet Sandy remained open to the idea that her growing awareness of her numbness—an insight gleaned through her therapeutic work—may have held the potential for significant improvement. Her overall mental health remained relatively high, in spite of this faltering. Indeed, in her final narrative, Sandy described a new perspective on her life that she gained from being in therapy and, in doing so, laid plain her robust sense of agency:

> ...This openness is probably the most significant shift in my life. Having always been brutally honest, yet not always so blatantly open, I have a joy-filled freedom in my OPENNESS to self exploration, self awareness and self expression that I have not seen in many, many years, if I can remember having this reality at all. I am making a tremendous sacrifice to get this processing done. And I just feel an increase in the intensity in the heat, time commitment, and personal sacrifice to get through to the other side of pain, confusion and discontentment. I feel enlightened

> and inspired and encouraged and EMPOWERED for GREATNESS!!!!

It is hard to imagine a stronger use of agentic language than that contained in Sandy's concluding, all-capitalized remark. Indeed, her dramatic writing style elegantly demonstrates the degree to which her own sense of personal agency had helped her find her way to positive mental health. The extremity of Sandy's language might ultimately prove problematic if she were to someday feel unable to live up to this impressive achievement, but as far as her participation in this study, she nicely demonstrated the ameliorative potential of agentic narratives.

Sandy provides a case illustration of the general trends and findings from this study. The development of her individual therapy narrative nicely captures the ways in which participants in this study generally reconstructed their experiences in treatment in terms of their identity, especially the salience of the theme of agency in these stories. The specific coevolution of the narratives and clinical functioning over the course of Sandy's therapy also mirrors the primary results from the larger sample: Shifts in the theme of agency were observed to temporally precede improvements in mental health. (The role of narrative coherence was more ambiguous in Sandy's story, as it was across the sample.) This study was grounded in the stories of its participants not only as a vehicle for assessing narrative identity development but also to privilege the voices of therapy clients, who have often been left out of scholarly dialogues about mental health care (e.g., Duncan & Miller, 2000). As a result, this study offers both ideographic and nomothetic opportunities for understanding and illuminating the comingling of identity development and clinical improvement over the course of treatment.

Discussion

The present study represents the first investigation of narrative identity development over the course of a significant change experience that was designed to assess the coevolution of personal narratives and mental health. In focusing on psychotherapy as the unifying characteristic, the present study facilitates the exploration of identity development in a diverse sample of individuals undergoing the significant changes associated with treatment. Before they began therapy and in between each session for the first 12 sessions, participants wrote personal narratives and completed a multidimensional measure of mental health. The findings indicated 381 that over the course of treatment, participants' narratives showed significant increases in the theme of agency but not in their overall coherence. The rise in the theme of agency was significantly associated with improvements in mental health over time. In addition, lagged growth curve models indicated that changes in participants' narrative theme of agency occurred before their mental health improved (and not vice versa). Finally, the relationship between increases in the theme of agency and subsequent improvements in mental health remained statistically significant after accounting for the impact of other personality variables such as trait neuroticism and ego development and across a variety of individual differences in clients and therapists.

Narrative Change Over Time

In the present study, the theme of agency increased over the course of the 12 assessment points. This finding was predicted based on previous research that had identified agency as the central element in well-adjusted clients' retrospective accounts of their therapy (Adler & McAdams, 2007a; Adler et al., 2008). In these previous studies, participants who had the best mental health following treatment narrated their experiences as a victorious battle with a powerful villain—their problem. Thematically, the success of treatment was attributed to the protagonist's reemergence as an agentic individual, one who was empowered to vanquish his or her foe. Thus, it seems as though individuals doing well after psychotherapy narrate the experience of treatment as being marked by an evolution in their own ability to affect their circumstances, as opposed to being passive and at the whims of fate. There is now evidence that this is true when assessed both retrospectively and in a prospective, longitudinal fashion. This finding provides a key tool for understanding the development of narrative identity over a significant change experience and for highlighting clients' perspectives on their treatment. Therefore, it has application in the fields of personality development, psychotherapy process, and outcome research.

In contrast to the theme of agency, no significant changes were observed in narrative coherence over time. This was surprising, given the foundation of evidence for this hypothesis. A wide range of theoretical and empirical evidence suggests that the narratives of people with psychiatric symptomatology are characterized by low levels of coherence (e.g., Gruber & Kring, 2008; Hermans, 2006; Lysaker & Lysaker, 2006; Roe, 2001), and a few small-scale longitudinal investigations have indicated that coherence might increase over the course of therapy (e.g., Foa et al., 1995; Lysaker et al., 2005; van Minnen et al., 2002). As a result, it was predicted that narratives drawn from pretreatment and early treatment sessions would be significantly lower in coherence, thus establishing an upward trend over time. Indeed, in the present study the initial narratives did demonstrate low levels of overall coherence, ruling out a potential ceiling effect. Yet, in the present study, there was no consistent

pattern of changes in narrative coherence over the course of therapy. This finding raises several interesting questions about the role of coherence in narrating change experiences as they unfold. For example, the vast majority of research on narrative coherence, including work conducted by the present author (i.e., Adler et al., 2007), has focused squarely on retrospective accounts. Reliable differences have been observed in the coherence of retrospective narratives about a wide range of experiences, including psychotherapy, from people with different constellations of mental health (e.g., Adler et al., 2007; Baerger & McAdams, 1999). However, the present study assessed narrative coherence as the experiences of interest unfolded over the course of time. It seems likely, therefore, that narrative coherence plays different roles in retrospective accounts of completed experiences, in contrast to stories of those events as they play out. In regard to psychotherapy narratives in particular, coherence seems to be quite important for clients once treatment is over (e.g., Adler et al., 2007; Frank, 1961; Spence, 1982). Yet, while treatment is underway, it is possible that certain clients show increases in coherence while others show initial decreases and subsequent increases, or a different type of change, resulting in a null pattern when averaged across participants. It may also be that agency is an early indicator of improvement and that coherence emerges later on, even in narratives of unfolding experiences. Thus, the role of coherence in narrating change experiences as they unfold promises to be a fruitful domain for future research.

The Relationship Between Narrative Change and Mental Health

Having identified significant changes in participants' narratives over the course of 12 assessment points, it was possible to examine the relationship between these changes and changes in mental health. Aligning closely with the findings discussed above, the results suggested that increases in the theme of agency, but not coherence, were significantly positively associated with improvements in mental health over the course of treatment. This relationship remained significant when accounting for the impact of the passage of time. This pattern of results further extends those discussed above, suggesting that not only do personal narratives increase in the theme of agency over the course of psychotherapy but these increases are associated with improvements in mental health.

The present study design was not experimental in nature, and thus, it does not permit the evaluation of causal pathways between the narrative and mental health variables. Despite this, it was possible to determine the temporal precedence of changes in one type of variable relative to another. In other words, the present design did permit the construction of models that empirically determined whether shifts in one variable came prior to shifts in another variable. In addition to indicating a potential causal pathway, the establishment of temporal precedence is noteworthy in its own right, providing novel information about the unfolding pattern of changes that individuals experience.

To assess temporal precedence, several lagged growth curve models were constructed. In these models, the data from one variable were shifted a specified amount of time such that the relationship between its slope and the slope of a second variable could be assessed relative to each other's onset (e.g., J. D. Singer & Willett, 2003). The first set of lagged models was designed to assess whether changes in mental health temporally preceded changes in the narrative theme of agency. Despite the positive association between mental health and agency that was observed over the course of treatment, when changes in agency were lagged, this relationship was no longer determined to be statistically significant. In other words, changes in mental health were not significantly associated with changes in agency at one and two sessions subsequent. This indicates that no relationship was observed between participants starting to feel better and ensuing changes in their narratives.

The second set of lagged models was designed to flip the temporal order of variables. These models posed the question, Did changes in the theme of agency temporally precede participants' improvements in mental health? In marked contrast to the previous finding, the association between changes in the theme of agency and subsequent improvements in individuals' mental health was found to be significant and positive at lags of both one and two sessions. In other words, these models demonstrate that, on average, participants began to write about their experiences in therapy with an increasing sense of agency and, one session later, their mental health improved. Once again, while this finding cannot be interpreted to prove that changes in narrative identity cause the amelioration of psychiatric symptoms, it does establish the temporal order of these changes in a naturalistic sample.

Why does the theme of agency in psychotherapy narratives have this relationship with mental health? In many ways the theme of agency represents the storied incarnation of a belief that one is able to affect his or her circumstances, as opposed to being at the whims of external sources. The ameliorative potential of this broader perspective can be identified across a wide range of literature on optimal development and lies at the heart of self-determination theory (SDT; Deci & Ryan, 2000). SDT posits that people have innate tendencies toward psychological growth and naturally strive to master ongoing challenges within the context of their shifting social worlds. This conceptualization of the individual is

fundamentally agentic. However, when people are faced with difficulties that they cannot master on their own, their sense of agency is diminished, and their selfdeterminative potential is threatened. The very act of seeking help in this type of situation can be understood as an agentic act. Yet, in the present study, a significant increase in the theme of agency was observed in participants over the course of therapy: Participants' narratives were notably low in agency at their initial assessment point when they had already sought help, but had not yet met their therapist, relative to their subsequent narratives. This suggests that participants began to construe their work in therapy in increasingly agentic terms as time passed. Indeed, the centrality of client agency in clinical improvement has been regarded as important across therapists' theoretical orientations (Williams & Levitt, 2007), though this study marks the first to empirically document it in a naturalistic outpatient treatment setting.

It is also possible that the increases in agency observed in the present study represent a leading indicator of the successful narration of experiences of change. Theorists approaching psychotherapy from a narrative perspective have suggested that "an acceptable outcome [of successful treatment] would be the identification or generation of alternative stories that enable [the client] to perform new meanings, bringing with them desired possibilities" (White & Epston, 1990, p. 15). It seems possible that agency might be an early narrative characteristic to emerge as these alternative stories coalesce. If so, the findings of the present study might suggest that the transformation of description into narrative begins with agency and is only later codified with the emergence of coherence.[6]

The Impact of Other Personality Variables on the Relationship Between Narrative Change and Mental Health Change

In addition to assessing narrative identity, the present study assessed two additional personality constructs: the Big Five traits and ego development. Of these, only trait neuroticism and ego development were observed to show significant shifts between the first, pre-therapy assessment point and the 12th assessment point. As a result, two growth curve models were constructed to assess the relationship between changes in agency and subsequent improvements in mental health, controlling for the potential impact of each of these other personality variables. Neither the inclusion of trait neuroticism nor the inclusion of ego development in the models significantly altered the positive association between changes in agency and subsequent improvements in mental health. This was true despite the well-documented association between neuroticism and poor mental health (e.g., Krueger et al., 1996) that was also observed in this study. In addition, the observed relationship between increases in agency and subsequent increases in mental health was shown to be stronger among participants with lower Time 1 trait neuroticism. However, there was no significant impact of Time 1 mental health on the relationship between agency and subsequent increases in mental health. (Likewise, Time 1 ego development did not significantly impact the relationship between agency and subsequent improvements in mental health.) This pattern of results may indicate that people lower in trait neuroticism might be able to gain more impact on their mental health from the emergence of agency in their narratives than individuals higher in trait neuroticism, regardless of their initial mental health status. This set of findings from the present study suggests that the narrative theme of agency is a personality variable that bears a distinct relationship with mental health above and beyond that of traits and ego development. For personality researchers, this finding underscores the incremental validity of narrative identity in predicting significant outcomes. For psychotherapy researchers, it provides further justification for an emphasis on clients' narratives in exploring the process and outcome of treatment. Additional

Analyses Related to the Robustness of the Effects: Client and Therapist Variables

The finding that changes in the theme of agency were observed prior to changes in mental health was examined to see if it was consistent across a range of individual-difference variables pertaining to the treatment. A series of multilevel models was constructed to assess the relationship between changes in the theme of agency and subsequent changes in mental health across several client variables and several therapist variables. No significant differences were observed across client sex, race, educational level, income, or history of prior psychotherapy. Likewise, no significant differences were observed across participants depending on their therapist's race, educational degree, fee charged for services, or theoretical orientation. These findings echo much of the effectiveness research on psychotherapy, which has found that these client and therapist characteristics do not make a strong contribution to clinical outcome (see Beutler et al., 2004; Clarkin 383 & Levy, 2004, for reviews). Nevertheless, in the present study, a small but significant effect was identified indicating that the relationship between agency in the narratives and subsequent improvement in mental health was stronger for those participants who had female (vs. male) therapists. Some meta-analyses focused on therapist sex have identified a similar small but significant trend (e.g., Bowman, Scogin,

6 The author wishes to thank Laura A. King for this interpretation.

Floyd, & McKendree-Smith, 2001); however, more recent meta-analyses have failed to identify such an effect, nor have they identified one pertaining to therapist– client matching on sex (Beutler et al., 2004). In sum, the relationships between increases in the theme of agency and subsequent clinical improvement appeared robust across a range of client and therapist variables.

Limitations

As the first study of its kind, the present investigation is limited in certain respects. One limitation is likely to be of primary concern to scholars interested in narrative identity. The specific probe that was designed for eliciting narratives in the present study may be criticized for failing to ensure that participants' responses were truly narrative in nature. The probe asked participants to reflect on how their therapy was impacting them at that point and to consider the way in which this experience influenced their sense of self. Narrative research is strongly focused on the storied nature of the self (e.g., McAdams, 2001) and traditionally strives to compel participants to provide data that conform to the structure of stories. For example, my colleagues and I conducted a series of studies in which participants were explicitly asked to share "the story of your experience in psychotherapy," and the specific narrative probes pulled for a storied recounting of component episodes, such as "the problem," "the decision," and so on (Adler & McAdams, 2007a; Adler et al., 2008). There can be no doubt that of the nearly 600 narratives that were obtained as part of the present study, some fail to conform to a truly narrative structure. Certain responses were unquestionably lacking in narrative qualities. For example, one participant wrote,

> I have been feeling really good. The downward spiral "worry" episodes I get have been pretty minimal. I think the breathing, and changing thoughts, have helped me to minimize these episodes. Because of therapy, I'm feeling a little more confident and less worrisome. I have still been a little lazy in documenting things like my worry journal, but aggregately, I have been feeling better than I have in a long time. Therapy continues to give me hope to act and feel normal again.

This response displays the participant's reflections on her treatment and an analysis of why it is working. Yet it does not truly tell a story. While the reader understands the evolution of this participant's change over the course of treatment up to this point, the response is mostly reporting, not storytelling. It operates in what Bruner (1986) labeled the paradigmatic mode of thought, rather than the narrative mode, emphasizing the construction of a rational argument over the portrayal of a character's intentions as they shift over time (e.g., Adler, in press).

Nevertheless, the vast majority of responses that were generated by participants in the present study would properly be classified as true identity narratives. Significantly more often than not, partic384 ADLER ipants recounted their experiences in treatment as episodes in an unfolding story, sometimes with compelling imagery, characters, and symbolism. For example, one participant wrote,

> Over the weekend, my son and his step-father got into an argument and his step-father called him a failure. Now, my son is no angel, but he is not a failure. After that, my son confronted him, saying something like "Did you just call me—", and his step-father went to hit him for interrupting him. My son caught his hand to stop him from hitting him and it just became this huge mess. His step-father disowned him, my mother (who was there) did nothing, and I'm there, stuck in the middle. I felt like I was about to break into a million little pieces on the floor. Like my role is to somehow be the glue that holds everyone together, but I can't even keep myself together when they fight like that, I get so sad and scared inside. Luckily, my therapist said she had time for me today because I'm going to need help not crumbling.

In this response, the participant tells the story of her tumultuous weekend in an effort to convey how her therapy is affecting her this week. She introduces the narrative with an establishing sentence that orients the reader ("Over the weekend, my son and his step-father got into an argument....") and then provides a rich, mostly fluid description of the events. Although the story she recounts is about her family, the participant provides clear evidence of how the incident affected her, describing both its affective and cognitive consequences. She repeatedly uses the image of disintegration as a way of illustrating the ways in which this event impacts her own sense of identity. This story reveals the harsh paradox that while her role may be to function as the glue that holds the contentious family together, inside she doubts her own ability to avoid crumbling. While this particular example provides an especially rich narrative, one with vivid implications for the identity of the narrator, the vast majority of responses obtained from participants did rise to the standards of narrative identity researchers.

Another potential limitation of the present study is that its emphasis on the key role of agency in clinical improvement may represent a culturally informed artifact of the particular sample. While the theme of agency is regarded as one of the superordinate themes of narrative identity (McAdams et al., 1996) and would likely be

found in stories collected from most cultures, an emphasis on especially agentic responses to adversity may be a primarily Western approach. Narrative theorists suggest that personal narratives are at the center of culture (McLeod, 1997; Rosenwald & Ochberg, 1992) and that individuals draw from a menu of scripts available in their cultural context as they work to develop their own personal narratives (e.g., Habermas, 2007; Hammack, 2008; McAdams & Pals, 2006). In light of Western, especially American (see McAdams, 2006b), notions of personal responsibility, the present study's findings with regard to agency may reflect the American context in which it was conducted. Certainly, popular notions of American psychotherapy emphasize the central role of the client in bettering himself or herself (e.g., Kates, 1997). Examining the role of agency in psychotherapy narratives collected from individuals in a wider variety of cultures would be necessary to determine whether this particular finding can be understood to be universal or not.

In addition, the present study also failed to assess the potential impact of its assessment structure on participants' improvement. Turning first to the narratives, a voluminous literature suggests that expressive writing about one's experiences can be a productive intervention for the alleviation of psychological distress (e.g., Pennebaker, 1997; Pennebaker & Seagal, 1999; Sloan & Marx, 2004). It seems quite likely that the act of writing the narratives in the present study may have itself served as an intervention that may have contributed to participants' improved mental health. Indeed, in three out of the nearly 600 narratives that were collected, participants explicitly commented on this. For example, one participant concluded one narrative by noting, "Just writing these feelings down now makes me feel better and more enthusiastic about therapy. This step in the research I think actually helps my therapy. Thank you!" Such repetition may have influenced both the thematic elements of the narratives and self-reported mental health on the STIC. Without a doubt, the inclusion of a control group in the study design wherein participants were either not writing at all or were writing about insignificant events would have allowed for the direct assessment of the magnitude of the ameliorative effects of participation.

Turning to the assessment of mental health, it is also possible that the repeated administration of the STIC questionnaire, coupled with potential demand characteristics (participants' hope that their mental health would improve with treatment), may have impacted the results. These features are fundamental flaws in the design of most psychotherapy outcome studies and are important to acknowledge. In addition, the inclusion of only one measure of mental health represents a limitation of the present study. Having the participants' mental health rated by external masked interviewers who did not know the participants' point in the course of treatment and using a battery of assessment instruments would have been an improvement in addressing these concerns. Nevertheless, the STIC represents a quick, multidimensional self-report measure, one designed to tap not only distress but also positive functioning and a variety of other characteristics, and is therefore an improvement over other more restrictive assessment tools (e.g., Pinsof & Chambers, 2009; Pinsof et al., 2008, 2009).

Finally, it is important to acknowledge two limitations on the generalizability of the findings from the present study. First, from the perspective of narrative identity research, the impacts of the present study are necessarily limited by its focus on experiences of psychotherapy. While participants experienced a wide variety of changes over the course of the study, all of them narrated this change while in dialogue with a therapist (although the sample of narratives was kept confidential from the therapists). As such, the present study primarily focuses on guided development, as opposed to development in nontherapeutic situations. Second, from the perspective of psychotherapy process and outcome research, the lack of random assignment, manualized treatments, and post-therapy outcome measures does compromise the extent to which the findings from present study may apply to specific interventions for specific disorders. Nevertheless, the naturalistic setting of the present study was grounded in the literature on clients' perspectives on psychotherapy, which points strongly toward a common-factors emphasis (e.g., Elliott, 2008; Hermans, 2006; McLeod, 1997).

Conclusions and Future Directions

By virtue of its design and methodological approach, the present study sought to produce results aimed at supporting research on the connections between narrative identity development and mental health. A few of these conclusions and their implications for future research are described below.

Adoption of a personological approach. McAdams (1995) conceptualized personality as operating at three levels of analysis: dispositional traits, characteristic adaptations, and narrative identity. Each level provides unique information about the individual, and a personological approach that attempts to describe the whole person is one that takes all three levels into account (McAdams, 1995; J. A. Singer, 2005). The present study demonstrates the benefits of assessing personality in a holistic fashion and especially in demonstrating the incremental validity of personal narratives in predicting highly valued outcomes.

Identification of central themes that relate to mental health. The present study also provides evidence that certain narrative themes may be especially central to mental health. In particular, the theme of agency emerged

as bearing a strong relationship with mental health, and increases in the theme of agency were observed to occur prior to clients' clinical improvement. While the theme of agency has long been of interest to researchers interested in narrative (e.g., Bakan, 1966; McAdams et al., 1996), the present study extends prior work by examining the coevolution of this theme and mental health in a prospective, longitudinal design. It is worth noting that agency is certainly not the only narrative theme that would be of importance in future investigations. For example, the themes of personal growth (e.g., Bauer & McAdams, 2010), affective and exploratory processing (e.g., Lodi-Smith et al., 2009), positive self-transformation (e.g., Pals, 2006), redemption and contamination (e.g., McAdams et al., 2001), hope, self-worth, insight/processing, and avoidance (Hayes et al., 2005, 2007), as well as numerous others, might also offer promising areas for study.

Raising questions about the role of narrative coherence. My colleagues and I have demonstrated that narrative coherence is associated with mental health in three previous studies (Adler & McAdams, 2007a; Adler et al., 2007, 2008). Yet, in the present study, there was no discernable pattern by which narrative coherence evolved over the course of treatment, nor was it associated with improvement in mental health. It seems likely that when assessing narratives of a currently unfolding experience, coherence plays a somewhat different role than it does in recounting concluded episodes of change. As a result, the role of coherence in mental health over the course of psychotherapy offers a very promising avenue for future research.

Implications for the study and practice of psychotherapy. In the capstone chapter to the Handbook of Narrative and Psychotherapy, the editors of the volume commented, "Virtually all of the writers in this Handbook assert, implicitly or explicitly, that the stories told by clients change as a result of effective therapy.... However, there is still very little research evidence that bears directly on this assumption" (Angus & McLeod, 2004, p. 373). The present study provides one response to this call for research that will produce a clinically relevant examination of the development of clients' personal narratives and their association with 385 clinical improvement. Grounded in its naturalistic study design and its incorporation of mixed-method analytic strategies, this study will hopefully serve as a foundation for future work on clients' evolving narratives and their unfolding relationship with mental health.

Conclusion

This study represents the first empirical evaluation of narrative identity development over the course of a significant change experience—psychotherapy—that was designed to track the coevolution of personal stories alongside shifts in mental health in a fine-grained way. It demonstrates not only that narratives show a reliable trajectory within and across individuals but that such changes took place prior to associated changes in mental health. The results suggest that increases in the narrative theme of agency, a theme fundamentally concerned with finding purpose and meaning in life, precede improvements in mental health even after controlling for the impacts of other personality constructs (the Big Five traits and ego development) and the passage of time and across a variety of individual differences. In other words, the results indicate that individuals begin to tell new stories and then live their way into them. In doing so, the present study has sought to move the field of empirical research on narrative identity development forward in its methodological sophistication and to provide evidence of the incremental validity of narratives in predicting valued outcomes. In addition, the present study highlights the potential importance and mental health impact of clients' perspectives on psychotherapy.

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