



Personality and the coherence of psychotherapy narratives

Jonathan M. Adler ^{a,*}, Joshua W. Wagner ^a, Dan P. McAdams ^{a,b}

^a Department of Psychology, Northwestern University, 2120 Campus Drive,
Annenberg Hall 214, Evanston, IL 60208, USA

^b Department of Human Development and Social Policy, Northwestern University, USA

Available online 6 March 2007

Abstract

The stories people construct about themselves and their social worlds are key aspects of their identities [Bruner, J. S. (1990). *Acts of meaning*. Cambridge, MA: Harvard University Press; McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology*, 5, 100–122]. Whereas certain expected life experiences (e.g., leaving home, getting a job) may be relatively easy to narrate, more unexpected and difficult events, such as undergoing psychotherapy, may pose a challenge to successful narration. Yet it is especially important to successfully narrate one's experience in psychotherapy in order to maintain the gains from treatment [Frank, J. D. (1961). *Persuasion and healing: A comprehensive study of psychotherapy*. Baltimore, MD: Johns Hopkins University Press; Spence, D. P. (1982). *Narrative truth and historical truth: Meaning and interpretation in psychoanalysis*. New York: W.W. Norton]. The present study collected psychotherapy narratives from 76 adult former clients and coded them for the fundamental story criterion of coherence [Baerger, D. R., & McAdams, D. P. (1999). Life story coherence and its relation to psychological well-being. *Narrative Inquiry*, 9, 69–96]. Former clients that were high in trait Openness to experience and those at higher stages of ego development told more coherent stories about therapy. The relationship between ego development and narrative coherence remained significant even when controlling for Openness. The findings suggest that high ego development may provide narrators with the kind of sophisticated frameworks for meaning-making that are especially well-suited for the important task of making good sense of psychotherapy.

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Keywords: Narrative; Coherence; Psychotherapy; Ego development; Openness

* Corresponding author. Fax: +1 847 491 8999.

E-mail address: jadler@northwestern.edu (J.M. Adler).

1. Introduction

A growing number of researchers and theorists in psychology today conceive of human identity in *narrative* terms (McAdams, 2001; McAdams, Josselson, & Lieblich, 2006; Singer, 2005). According to these views, human beings are storytellers by nature, and the stories they tell about themselves and their social worlds form key aspects of their identities (Bruner, 1990; Pasupathi, 2001). The internalized and evolving stories people construct about their lives function to integrate diverse experiences and provide people's lives with some degree of unity and purpose (e.g., McAdams, 2001).

Certain life experiences are relatively easy to narrate and fit smoothly into the person's ongoing story of self. Events such as leaving one's parents' home, getting a job, and pregnancy are milestones that occur in many people's lives and most people are familiar with common cultural stories about these types of occasions. Adolescents and young adults may imagine these events in their future and form stories or scripts about how they imagine they will unfold (Elkind, 1981; Habermas & Bluck, 2000).

By contrast, other experiences pose a significant challenge to successful narration. They may be unexpected or difficult and are rarely to be found in people's imagined future scripts. When these events do occur they resist easy incorporation into one's narrative identity, for the individual is posed with the often daunting task of constructing a story about them in order to render them meaningful. As a result, the individual is faced with significantly revising his or her existing self-story. The experience of having been in psychotherapy is a good example of one of these particularly challenging episodes. Going to therapy is typically an emotionally laden event that is not commonly a part of people's imagined future scripts. Indeed, idealized stories about living a good life typically do *not* contain chapters wherein the protagonist enters psychotherapy (McAdams, 2006a). Nonetheless, when people have been in psychotherapy, the experience often stands out as especially significant. Indeed, in an investigation of people's life stories, Lieblich (2004) found that her participants spontaneously brought up their experiences of psychotherapy when recounting their lives and often referred to these experiences as key sites of their development. The crafting of a viable personal narrative about the psychotherapeutic experience would therefore seem to be an important identity challenge. This is an idea with a long theoretical tradition. Indeed, in his classic book on psychotherapy, *Persuasion and Healing*, Frank (1961) suggested that the storying of psychotherapy—weaving the “myth” of the therapeutic experience—is fundamental to the individual's continued optimal functioning once treatment has ended (p. 327). Spence (1982) echoed this sentiment suggesting that the therapeutic narrative “may also maintain its structure over time and enable the patient to better retain what he [sic] learned during the analysis” (p. 270).

From this perspective, carrying forward a successful story of one's psychotherapy supports the maintenance of the gains from treatment. In addition, a large body of research on clients' experiences of psychotherapy (e.g., Adler & McAdams, 2007a; Adler & McAdams, 2007b; Angus & McLeod, 2004; Elliott & James, 1989; Howard, 1991) suggests that clients narrate these experiences in reliably different ways. Finally, there is a growing interest in the intersection of personality and psychotherapy that emphasizes the central role of narrative in explicating this relationship (e.g., Adler & McAdams, 2007a, 2007b; Angus & McLeod, 2004; Singer, 2005).

Life-narrative research shows that people's stories about their lives differ substantially and that people vary a great deal in their abilities to narrate good or satisfying stories

about personal experiences (McAdams, 2001, 2006a; Thorne, 2000). For example, life-narrative accounts that contain many scenes of overcoming adversity and finding redemption from suffering (McAdams, Reynolds, Lewis, Patten, & Bowman, 2001), that anticipate happy endings and a sense of closure (King, Scollon, Ramsey, & Williams, 2000), and that emphasize intrinsically motivated life strivings (Bauer & McAdams, 2004a; Bauer, McAdams, & Sakaeda, 2005) tend to be associated with higher levels of self-reported life satisfaction. By contrast, life stories featuring contamination sequences—emotionally positive scenes that are described as being overwhelmed by bad outcomes—tend to be associated with depression and with low levels of self-esteem and satisfaction with life (Adler, Kissel, & McAdams, 2006; McAdams et al., 2001). Certain personality variables, furthermore, appear to be predictive of important individual differences in life stories. People high on trait Neuroticism tend to tell more emotionally negative stories about their lives, and people high on Openness to experience tend to tell more complex stories (McAdams et al., 2004; Raggatt, 2006).

One dimension of personality that consistently shows strong relations to life narration is Loevinger's (1976) concept of *ego development*. For Loevinger, the "ego" refers to a person's overall framework for making sense of personal experience (Westenberg, Blasi, & Cohn, 1998). At low (immature) stages of ego development, the person tends to interpret experience in highly egocentric and simplistic ways; in the middle stages of ego development a person's framework becomes more differentiated and socialized as he or she comes to adopt many of the conventions of society and culture; at the highest (most mature) stages, a person's perspective on the self and the world allows for considerable complexity and nuance and is guided by internalized, self-determining principles of life. A substantial body of research suggests that adults who score relatively high in ego development, as assessed through a standardized sentence-completion test (Hy & Loevinger, 1996), tend to construe their lives as *complex stories of personal transformation and growth* (e.g., Bauer & McAdams, 2004a, 2004b; Bauer et al., 2005; King & Raspin, 2004; King et al., 2000; King & Smith, 2004; McAdams, 1985; McAdams, Booth, & Selvik, 1981; McAdams, Ruetzel, & Foley, 1986; Pals, 2006). People at higher stages of ego development tend to prioritize personal change in their life stories, highlighting life scenes in which they experienced epiphanies and insights and explaining clearly the ways in which they have evolved, progressed, or developed over time. They often describe how changing circumstances in their lives, such as divorce or career shifts, have brought about important developments and accommodations in their understandings of themselves.

The current study examines how differences in ego development may be related to the ways in which adults narrate the experience of psychotherapy. Among other things, psychotherapy marks an important change in a person's life—an intentional effort to change one's life for the better (e.g., Brandtstadter, 1999). In addition, the circumstances leading up to therapy may also represent important life transitions, in that many people seek treatment after they have experienced negative changes in their lives, such as divorce, the onset of a depressive episode, job setbacks, and the like. Once therapy has been terminated, the person faces the challenge of incorporating the therapy experience into his or her ongoing life narrative. In that people at higher stages of ego development tend to adopt a more nuanced understanding of life, one that readily expects and incorporates personal change, they may be better positioned, psychologically speaking, to make good sense of their therapy experiences. More specifically, people at higher stages of ego development may be bet-

ter able, compared to their counterparts at lower ego stages, to construct especially *coherent* stories of psychotherapy.

Many narrative theories in psychology identify coherence as an especially significant feature of life stories (e.g., Dimaggio & Semerari, 2004; Habermas & Bluck, 2000; Labov, 1972; Mandler, 1984; McAdams, 2006b). Theorists argue that people provide their lives with some degree of coherence through life storytelling and that some life stories are more coherent than others. Investigators have defined coherence in many different ways. Some researchers have focused on the structural aspects of life-narrative accounts, arguing that especially coherent narratives spell out a clear temporal and causal sequence of goal-oriented actions (Mandler, 1984). Other investigators have argued that story coherence is as much in the mind of the audience or listener as it is in the story itself. Especially coherent stories resonate well with the listener's experience and describe life in terms that make sense within a culture's expectations about how lives are to be lived (McAdams, 2006b). Habermas and Bluck (2000) identify four different features of coherence in life stories: Temporal coherence is the extent to which a story follows a well-ordered sequence of events; causal coherence is the extent to which a story convincingly explains how early events cause or lead to later ones; thematic coherence refers to a story's organization around a central theme; and autobiographical coherence refers to how closely a life story follow a culture's normative expectations regarding the human life course.

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. They operationalized coherence in terms of four dimensions: (a) orientation (the extent to which the author locates the characters and action in a specific context or setting), (b) structure (the extent to which the story follows a temporal sequence of goal-oriented action), (c) affect (the extent to which the story expresses emotion in a clear and understandable way), and (d) integration (the author's ability to link the narrated events to larger life themes and meanings). Baerger and McAdams (1999) rated life interviews obtained from 50 midlife adults for their four dimensions of coherence. Their results indicated that adults who told more coherent life stories tended to enjoy higher levels of self-reported psychological well-being compared to adults whose life stories scored lower on narrative coherence. Previous research has also indicated that *incoherence* in personal narratives may be a marker of psychopathology (i.e., Roe, 2001) and that increasing the coherence of one's life story is one goal of psychotherapy (i.e., Lysaker, Davise, Hunter, Nees, & Wickett, 2005; Lysaker, Lancaster, & Lysaker, 2003; Lysaker, Wickett, Campbell, & Buck, 2003).

The present study adopts Baerger and McAdams (1999) method to analyze the relative coherence of people's narrative accounts of psychotherapy experiences. The reconstruction of psychotherapy may pose especially daunting challenges for narrators as they struggle to make sense out of a notably difficult period in their lives. It is expected that narrative accounts of past psychotherapy experiences should vary considerably on the dimensions of narrative coherence. Furthermore, individual differences in personality should be associated with differences in narrative coherence. Specifically, *this study hypothesizes that individuals at higher stages of ego development should construct especially coherent narratives of psychotherapy whereas those individuals lower stages in Loevinger's (1976) scheme should show less coherence in their narrative accounts of psychotherapy.* High levels of ego development may provide narrators with the kind of sophisticated frameworks for meaning-making that are especially well-suited for the important task of making good sense of

psychotherapy. People at high stages of ego development tend to describe rich inner lives and tend to understand the life course in terms of progressive change and growth. By contrast, those at low stages of ego development may have a more difficult time constructing coherent accounts of difficult events like psychotherapy. Adults at low stages of ego development tend to prioritize stability and continuity in the life course, and they tend to assimilate their understandings of self to societal conventions. Given that psychotherapy itself is not commonly viewed as a predictable stage or happening in the life course and given that society provides few guidelines regarding how people should move through therapy experiences, individuals at low stages of ego development may have a more difficult time, compared to their peers higher in ego development, narrating coherent accounts of psychotherapy. This is an especially important matter, given the theoretical emphasis on the significance of crafting a good psychotherapy story (e.g., Frank, 1961; Spence, 1982). It is worth noting that the question of whether the experience of psychotherapy itself increases individuals' level of ego development remains largely untested. It seems quite possible that psychotherapy itself facilitates a more nuanced and differentiated approach to meaning-making and that higher stages of ego development are themselves outcomes of treatment. Certain prior longitudinal research supports this claim (i.e., Lysaker et al., 2003, 2005), though these studies were limited by small sample sizes and samples comprised of severely mentally ill patients. Thus, the extent to which their findings generalize to a more representative treatment-seeking population remains to be tested. The cross-sectional nature of the present study limits our ability to address this important question.

Beyond ego development, other potential predictors of narrative coherence in psychotherapy accounts include the trait of Openness to experience, level of education, and verbal intelligence. Individuals high in Openness to experience tend to value variety and change in life, tend to be more psychologically minded, and tend to express a good deal of complexity in their views and opinions, compared to individuals low in openness. McCrae and Costa (1980) have documented significant positive associations between self-reported Openness and Loevinger's sentence-completion measure of ego development. Education level should also be a positive predictor of narrative coherence in psychotherapy accounts. Individuals with higher levels of education may have more cognitive resources to make sense of difficult personal experiences. They may also have more experience in writing about events in their lives and more exposure to cultured scripts about psychotherapy. Also, it is possible that verbal intelligence may relate to the ability to narrate psychotherapy stories in especially coherent ways. While we are unable to directly assess verbal intelligence in the present study, several attempts to control for this potential confound were built into the study design, described below. Finally, the present study also obtains self-report measures of well-being, which has previously been shown to relate to narrative coherence (Baerger & McAdams, 1999).

2. Methods

2.1. Participants

Seventy-six adults were recruited from the greater Chicago area through advertisements in local newspapers. These individuals had all been in psychotherapy (individual or couples treatment, for at least eight sessions) in the past five years, but were not currently

in any form of treatment. Demographic descriptions of the diverse sample are included in Table 1. The distribution of gender and race in the present sample are similar to those commonly found in treatment-seeking samples drawn from the general population (Wang et al., 2005).

2.2. Materials

2.2.1. Narratives of psychotherapy

Each participant wrote extensive narrative accounts of the following five key scenes in their therapy story: *The Problem* (a specific scene in which the presenting problem was especially clear or vivid), *The Decision* (a specific scene in which it was decided that therapy was the appropriate route to address the problem), *Most Important Session* (a specific session that the participant deems the most significant), *Another Important Session* (a specific session, different from the previous one, that the participant also deems significant—obtained to gather more data on the process of psychotherapy), and *Ending* (a specific scene that describes a time before, at, or after termination, in which the impact of the therapy was especially clear or vivid). An optional sixth scene was also available for participants to write any other important information they felt was not captured in the rest of the narrative (more thorough descriptions of the stories are described in Adler & McAdams, 2007b).¹

2.2.2. Quantitative measures

Participants completed a demographics questionnaire along with several other self-report measures:

Traits were assessed with the Big Five Inventory (BFI), a 44-item self-report rating scale designed to measure each of the five traits commonly subsumed under the Big Five framework (John & Srivastava, 1999). These five traits are labeled Neuroticism (N), Extraversion (E), Openness to experience (O), Conscientiousness (C), and Agreeableness (A). Each of the items on the BFI is answered along a five-point Likert-format scale, and is keyed to one of the five traits. The present study focused on trait Openness (O).

Ego development was assessed using the Washington University Sentence Completion Test of Ego Development (SCT; Hy & Loevinger, 1996; Loevinger & Wessler, 1970), which is considered the gold standard for measuring ego development and has served as the primary instrument by which this construct has traditionally been measured (Westen-

¹ Given the present interest in the coherence of participants' stories it is reasonable to suggest that this semi-structured format might unduly influence the structure or content of the narratives obtained. Without a doubt, if asked to simply "tell us about your therapy experience," many people might not follow a script like this one, wherein they begin with the problem and then move to decision, main scenes from therapy, and an ending. Nonetheless, there are several reasons to support the decision to provide participants with a framework for telling these stories. First, there is a strong tradition in the field of narrative research of providing participants with some structure for conveying their stories. For example, McAdams has developed a widely used semi-structured interview for obtaining life stories that asks participants to break their lives into chapters and then recount a series of important scenes (e.g., McAdams, 1993). Second, the particular structure we adopted was based heavily on the format used in a previous study on voluntary life transitions (Bauer & McAdams, 2004b), a category into which psychotherapy would fit. And third, because the structure provided is standardized across participants, between-subject comparison of the different stories is facilitated.

Table 1

Demographic characteristics

Demographic characteristic	Number (%)	<i>M</i> (<i>SD</i>)
Sex		
Male	26 (34)	—
Female	50 (66)	—
Race		
African-American	22 (29)	—
Asian-American	3 (4)	—
Caucasian	47 (62)	
Hispanic	4 (5)	
Age (years)	—	35.28 (10.37)
Education level ^a	—	3.50 (1.03)
Income ^b	—	2.12 (1.53)

^a Education level was coded on a 5-point scale where 1 = less than high school, 2 = high school, 3 = some college, 4 = college (B.A. or B.S.), 5 = graduate work.

^b Annual income was coded on a 7-point scale where 1 = < \$20,000, 2 = \$20,000–40,000, 3 = \$40,000–60,000, 4 = \$60,000–80,000, 5 = \$80,000–100,000, 6 = \$ 100,000–120,000, 7 = > \$120,000.

berg et al., 1998). The SCT asks participants to complete 18 sentence stems (e.g., “When I am criticized...,” “Being with other people...,” “When people are helpless...,” and “Rules are...”). Each item is scored according to established guidelines, aggregated, and assigned a Total Protocol Rating (TPR). The TPR score corresponds to different stages of ego development. In the present study, the SCT was rated by a coder trained to Loevinger’s standard of reliability (agreement > 85% with the coding manual’s reliability coding examples; Hy & Loevinger, 1996). While Loevinger (1976) conceptualized different stages of ego development as representing distinct types, in our analyses we follow the lead of previous researchers (e.g., Bauer & McAdams, 2004a; Bauer et al., 2005; King & Raspin, 2004; King et al., 2000) and will treat SCT TPR scores as continuous interval data. The distribution of TPR scores in our sample spans the full range of ego developmental stages, from Impulsive (I-2) to Integrated (I-9). The mean SCT TPR score was 90.43 and the modal SCT TPR score was 86, both falling in the Self-Aware (I-5) stage, which are consistent with normal distributions of ego development.

Given previous work establishing a relationship between narrative coherence and psychological well-being (e.g., Baerger & McAdams, 1999), a composite measure to assess participants’ well-being was created. This composite was comprised of participants’ standardized scores on: the *Satisfaction with Life Scale* (Diener, Emmons, Larson, & Griffin, 1985); *Positive and Negative Affect Schedule* (Watson, Clark, & Tellegen, 1988); *Psychological Well Being* scales (Ryff & Keyes, 1995); and the *Hopkins Symptom Check List* (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974). These measures were selected to provide a comprehensive conceptualization of psychological well-being, encompassing both hedonic and eudiamonic dimensions (Ryan & Deci, 2001).

2.2.3. Coding narrative coherence

As explained above, the coherence coding system developed by Baerger and McAdams (1999) was adopted. This system operationalizes coherence using four indices: *orientation*, *structure*, *affect* and *integration*. Each narrative receives a score from 1 (low coherence) to 5

(high coherence) on each of these 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. This relies on introducing main characters and on situating the episode in a specific temporal, social, and personal context. In this way, the orientation index taps the extent to which participants explained how this story fit into the ongoing story of self that had led up to it. In the present study, high scores on orientation were assigned to those narratives that described the relevant personal history that preceded the entry into therapy. This could include the emergence of their problems, the relational context of their lives, or the emotional setting of their lives just before this episode. Here is an example of a segment from one account that received a high score (5) on orientation:

It was my 11th grade summer and the previous school year had been a train wreck. My grades were awful, my grandfather had passed of cancer (which I found out on my birthday), a close family friend passed, and I was still in a lot of pain from when we had to give my niece up for adoption (who I helped my mother raise until I was 15). But the main thing was my [relationship with] my father . . . So all of my feelings towards all of these things I tried to suppress and depressed me . . . One day I was watching a show on *Oprah* about ‘fathers and sons that have dysfunctional relationships.’ I asked [my father] if he’d watch it with me. I could tell I’d made him mad. We argued for hours. He told me that he didn’t care. I went upstairs to my room and I cried, and heaved, and screamed for hours. I hated him for a long time after that . . . This drove me to counseling . . .

This participant provides a great deal of context for his entry into treatment. He locates the narrative in time, explains a series of difficulties that plagued his family, and points to a specific event that acted as the tipping point or the crystallization of his discontent (Baumeister, 1994). The reader has a strong feeling for the background leading up to this episode.

In contrast, here is an example of a segment from a narrative that received a low score (1) on orientation:

I was so depressed I was missing a lot of work and also my OCD and general anxiety were worsening. I was afraid of being fired due to time lost at work. [This] stands out due to my extreme anxiety level at the time. . . I was thinking about seeing a therapist, as medication wasn’t enough. I was anxious, but feeling desperate.

This participant does not provide any context for his troubles—we do not know when they began or what made him decide to begin his narrative at this moment, as opposed to at some other time. We are not told how his anxiety has figured in his life up until this point. Indeed, the narrator does not orient the reader as the episode seems to arrive out of nowhere.

The *structure* index of coherence assesses the extent to which the narrative displays the structural elements of an episode system. In other words, this index requires the narrative to have at least one of the following: an initiating event; an internal response to this event (e.g., a goal, plan, thought, feeling); an attempt (e.g., to reach a goal, carry out a plan,

remedy a crisis, resolve a state of emotional disequilibrium); and a consequence. Narratives high in structure present a logical flow of scenes that are presented in a causally and temporally logical way. The following example comes from the middle of a narrative that received a high score (5) on structure:

I hated the way I felt with the depression and decided I could recover on my own. However, after a humiliating sexual assault incident, I decided to go back into counseling and discovered I didn't recover as fully as I thought I had. It was two sessions after my initial return that my counselor started pinpointing qualities that we had never thought of before. It was so interesting to see how the past qualities may have been linked to childhood events and possibly ADD, a concern we never thought of. All of a sudden, it became more clear, we had broken through the eating disorder symptoms, to find another cause of my behavior. We didn't focus on ambiguous situations and looked at a potential cause. I felt so relieved that my counselor and I had found agreement on a topic and both were enthusiastic about finding a solution. I knew things were, or had, changed as I was willing to look at all alternatives as my solution.

This participant recounts a string of events in a way that is chronological and easy to follow: She had decided to leave therapy, but then was assaulted and chose to return. The second course of treatment brought new explanations for old problems, and she felt positively about how they would move forward. As such, this excerpt nicely captures the narrative's strength in walking the reader through a tumultuous series of episodes.

On the contrary, the following narrative received a low score (1) on structure:

Was hooked on drugs and would do almost anything to get them. One night I took the car and stayed out all night and my pregnant wife could not get to work. When I saw her the next day, we argued and she put me out with no where to go. I realized it was time to seek help. [Another] day I took my mother's cash station card and withdrew money without her knowledge, to do drugs. At this point I knew I had to get help for my problem.

This story describes two incidents, both of which are pointed to as the signaling to the narrator that he needed to go to therapy. The reader is unable to chronologically sequence the events, and it is unclear how they are connected to each other and which one of them directly preceded his entry into treatment.

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. It conveys the extent to which the narrator uses affective language to convey the importance of the events recounted. Here is an excerpt from a narrative that received a high score (5) in affect:

I felt totally betrayed by my parents and [by my] counselor for letting them attend my session. As a result, I said things to my mother that I knew would hurt her and sat back and couldn't believe what I was saying was real! It was so bizarre for me to do things like that.

This narrator indicates how her feelings of betrayal led her to act in a way that was unusually hurtful, a point that is underscored by her use of the exclamation point. In this way, the narrator conveys the significance of this session—a rupture in the therapeutic alliance and an out-of-character lashing out at her mother—by framing them in the emotional language of betrayal.

In contrast, here is an excerpt from a narrative that scored low (1) in affective coherence:

One of my sessions was particularly beneficial. It was when my [therapist] told me that the only way to stop the obsessions and compulsions was to keep things unorganized and live with it for some time, I remember thinking about doing this and thinking that there could be a big change if I did these things.

In discussing this important session the narrator does not use emotional language to make an evaluative point about the experience. He interprets the advice cognitively, but without an accompanying affective response the lasting significance of this session is not clear.

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. The narrative communicates information in an integrated manner, such that it expresses the meaning of the recounted experiences within the context of the larger life story or as it fits into his/her identity. Discrepancies and ambiguities are incorporated into a unified story. Here is an example of a narrative scoring high (5) on integration:

Psychotherapy...did not solve my problems. There was no perfect diagnosis for which I then received “treatment” and was “cured.” Perhaps it works that way for some people. For me, certain hypotheses were presented (ADHD, perfectionism) that acted as keys—magical, they seemed at the time—to unlock new ways of understanding my life. Just as living in another culture (which I also have done) destabilizes all your assumptions of what is natural and true, so labeling myself “ADHD” or “perfectionist” opened up possibilities of other ways of being.

This woman eloquently describes how her therapy resonated with other experiences in her life, such as living abroad. She reflects on the treatment with some perspective and likens its impact to that of living in a foreign country. In this way, she integrates this new experience into her sense of self and interprets it in light of past experiences.

In contrast, the following excerpt is the conclusion of a narrative that scored low (1) on integration:

Everything is really going fine. I have been taking my medication everyday since [I ended therapy] and will keep taking it for the rest of my life to keep feeling better.

While this narrator describes a major life change—the commitment to lifelong medication usage to manage her depression—she does not suggest how it has impacted her sense of self or fits into the rest of her life. The therapy is portrayed as circumscribed, though the treatment will endure. As such, this narrative represents a low level of integration.

Narratives were coded by two independent raters who had been trained in the Baerger and McAdams (1999) coding system described above. The raters coded the entire account, reading across all five (or six) scenes, for narrative coherence. The raters achieved high levels of inter-rater reliability for each of the indices; intra-class correlations were .91 for Orientation, .79 for Structure, .80 for Affect, and .93 for Integration.²

In addition, the length of narratives, as captured by word count, was calculated, to account for the potential effects of verbosity in influencing the results. While not a perfect proxy for verbal intelligence, length of narrative does account for some facets of verbal intelligence that may relate to coherence scores. Thus, education and word count will serve as our methods for controlling for the potential impact of verbal intelligence.

3. Results

Descriptive statistics concerning all self-report variables and coding indices are presented in Table 2. Most of these variables have nearly normal distributions, though the mean of the sample was somewhat high on trait Openness compared to the possible distribution.

Table 3 displays the inter-correlations between the four indices of narrative coherence. The high values of these correlations provides support for the creation of an average coherence variable for use in future analyses, as in Baerger and McAdams (1999). The inter-correlations between indices of narrative coherence are higher in magnitude than those obtained in Baerger and McAdams (1999). This finding may be due to this study's emphasis on narratives of one particular type of event (i.e., psychotherapy), while Baerger and McAdams (1999) coded entire life story narratives.

Table 4 displays the correlations between demographic variables, trait scores, length of narratives, well-being, ego development, and average coherence. It is important to note that length of narratives (word count) is not significantly associated with any of the other variables. It was therefore excluded from subsequent analyses. Several variables are significantly positively correlated with average narrative coherence: female sex ($r = .31, p < .01$), income ($r = .27, p < .05$), education ($r = .23, p < .05$), trait Openness ($r = .35, p < .01$), and ego development ($r = .60, p < .01$). Thus, as hypothesized, two personality-level variables—Openness and ego development—are significantly related to narrative coherence. When these personality-level variables were correlated with narrative coherence while controlling for the demographic variables (sex, race, age, education, income), their relationships remained significant. The partial correlation between Openness and average coherence, controlling for these demographic variables was $r = .36 (p < .01)$ and the partial correlation between ego development and average coherence, controlling for these

² While on the surface it may appear that both the SCT and the coherence coding system are similar in that they both involve the rating of written text, these two procedures are quite different in practice. The SCT manual relies on very specific rules for coding the completed sentence stems, based on both the content and the structure of the responses. The elaborate manual indicates the proper codes for virtually all possible responses, with specific word choice or sequencing resulting in different scores. In contrast, the Baerger and McAdams (1999) coherence coding system we adopted relies on a very different type of coding. Here, entire narratives are assigned scores on four dimensions of coherence based on their overall demonstration of each one (described in more detail above). Indeed, it would not be possible to code SCT responses—usually one sentence long—using the coherence coding system, nor would it be possible to code the psychotherapy narratives using the SCT manual. So the extent of conceptual overlap or method variance between these two constructs is minimal.

Table 2
Descriptive statistics of self-report and coding variables

Variable	Mean	SD	Range
Trait Openness	4.01	.59	2.2–5
Ego development (SCT TPR score)	90.43	13.18	58–126
Well-being ^a			
SWLS	16.56	4.94	5–26
PANAS +	3.36	0.85	0.8–5.0
PANAS –	2.52	0.87	0.9–4.6
PWB (mean)	36.01	6.62	7.44–46.67
HSCL	49.38	14.07	14–87
Word count (No. of words)	706	353	231–1790
Orientation coherence index	3.05	1.22	1.0–5.0
Structure coherence index	2.93	1.15	1.0–5.0
Affect coherence index	3.20	0.99	1.0–5.0
Integration coherence index	3.21	1.32	1.0–5.0
Average narrative coherence	3.10	1.02	1.0–5.0

^a SWLS, Satisfaction with Life Scale; PANAS, Positive and Negative Affective Schedule; PWB, Psychological Well-Being; HSCL, Hopkins Symptom Check List.

Table 3
Correlations between indices of narrative coherence

	Orientation	Affect	Structure	Integration
Orientation				
Affect	.71**			
Structure	.60**	.69**		
Integration	.62**	.76**	.67**	

** $p < .01$.

demographic variables was $r = .54$ ($p < .01$). In other words, individuals who are high in Openness to experience and those at higher stages of ego development are able to construct stories about their experiences in psychotherapy that are more coherent than their low-Openness and low-stage ego development peers, even controlling for the influence of these demographic variables.

Scholars of ego development may wonder whether its observed relationship with narrative coherence is curvilinear—if those individuals at the highest stages of ego development, who tend to feel less of a press for reductionistic conceptions of the life, might resist the neatness of coherent narratives (e.g., Wayment & Bauer, *in press*). Yet a scatterplot of the relationship between ego development and narrative coherence does not support this contention, as shown in Fig. 1. Indeed, our sample is evenly distributed across the stages of ego development, stretching into the lower adult stages (Impulsive (I-2)) and the highest stages (Integrated (I-9)), and a quadratic line does not provide a significantly different fit to the relationship than a linear solution. It seems that the ability to craft a coherent narrative out of such a challenging experience as psychotherapy is better accomplished by those at higher stages of ego development, even at the highest stages.

In light of the significant relationships between Openness and narrative coherence and between ego development and narrative coherence, and given the significant positive correlation between Openness and ego development ($r = .26$, $p < .05$), the potential issue of mediation arose. As one of the five major dispositional traits, Openness can be understood

Table 4
Inter-correlations among primary variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Sex (1 = male, 2 = female)														
2. Race (1 = white, 2 = AA)	-.07													
3. Age	-.30**	.09												
4. Education	.16	-.26*	.00											
5. Income	-.04	-.28**	.03	.24										
6. N	-.06	-.23**	-.08	-.01	-.09									
7. E	-.14	-.03	.15	-.11	.02	-.27*								
8. O	.02	-.14	-.01	.06	-.06	-.04	.27*							
9. A	.09	.27*	.14	-.07	-.08	-.29**	.14	.05						
10. C	.17	.12	.19	.03	.29*	-.33**	.13	.11	.29*					
11. Word count	.27	-.18	-.19	.19	-.19	.24	-.22	.11	-.26	-.11				
12. Well-being composite	.04	-.05	-.20	.02	-.12	-.07	.41**	.25*	.05	-.02	.17			
13. SCT (Ego development)	.12	-.16	.05	.18	-.26*	-.04	.14	.33**	-.07	.18	-.03	.18		
14. Average coherence	.31**	-.10	-.11	.27*	.23*	.01	-.12	.35**	-.10	.28	.11	.03	.60**	

* $p < .05$.

** $p < .01$.

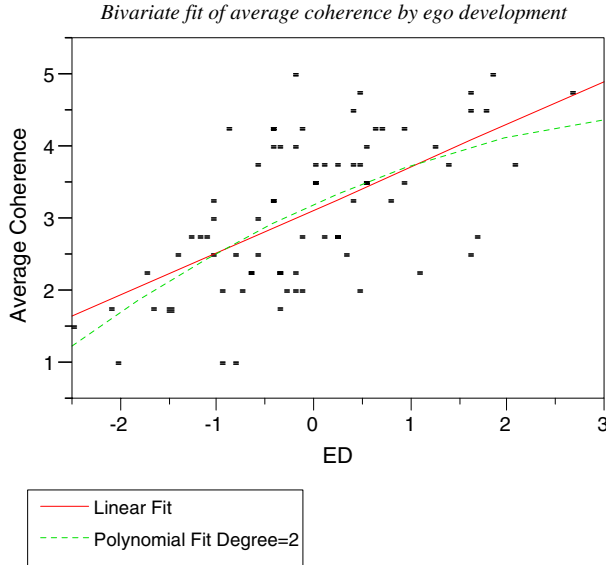


Fig. 1. Bivariate fit of average coherence by ego development. Linear fit $R^2 = .36$. Polynomial fit $R^2 = .32$.

as a largely stable and decontextualized construct at the foundation of personality (McAdams, 2001). In contrast, ego development represents a more dynamic, developmental aspect of personality, labeled one of the many characteristic adaptations (McAdams, 2001). In other words, the question is whether one of these constructs, which have been theorized to operate at different levels of personality (McAdams, 2001), fails to be significantly associated with narrative coherence once the variance explained by the other construct is taken into account. For example, it is possible that the relationship between ego development and narrative coherence is better accounted for by considering the dispositional signature attributable to trait Openness. Alternatively, it is possible that the ability of Openness to predict coherence is accounted for by the impact of ego development. The primary hypothesis of this study concerned the coherence of psychotherapy stories told by participants at different stages of ego development. Therefore, multiple regression analyses were conducted to determine if ego development mediated the relationship between trait Openness and narrative coherence. The results of these analyses, displayed in Table 5, suggest that ego development was indeed a significant mediator: the significant association

Table 5
Results of simultaneous regression analyses predicting average coherence from Openness and ego development

Criterion	Predictor(s)	Beta	SE	Partial r	t	p
Average coherence [$R^2 = .13$, $F(1, 75) = 10.57$, $p < .05$]	Openness	.35	.19	.35	3.25	<.01
Average coherence [$R^2 = .36$, $F(1, 75) = 27.89$, $p < .001$]	Ego development	.60	.09	.60	6.41	<.001
Average coherence [$R^2 = .38$, $F(2, 75) = 22.79$, $p < .001$]	Openness	.18	.17	.21	1.81	=.08
	Ego development	.54	.10	.54	5.55	<.001

between Openness and narrative coherence was rendered non-significant when the role of ego development was taken into account. Ego development remained a significant mediator of the relationship between Openness and narrative coherence when controlling for demographic variables as well. While the significance level criterion is not a perfect test of mediation and the relationship between trait Openness and narrative coherence was not reduced to zero when including ego development, we can conclude that the relationship between trait Openness and narrative coherence is at least partially mediated by the role of ego development.

4. Discussion

The results indicate that when faced with the important yet challenging task of crafting a story out of the atypical and emotionally charged experience of going to psychotherapy, people at higher stages of ego development tend to construct more coherent narratives than those at lower stages. Indeed, the association between ego development and narrative coherence was shown to partially mediate the relationship between trait Openness to experience and narrative coherence. In other words, when accounting for the tendency for individuals at higher stages of ego development to tell more coherent stories about therapy, the observed relationship between Openness and narrative coherence ceased to remain statistically significant. This finding provides the first piece of evidence to suggest which individuals might more successfully narrate their experiences in psychotherapy.

As Frank (1961) and others (e.g., Spence, 1982) asserted, the ability to construct viable stories about one's therapy is vital to maintaining the psychological gains one made there. While humans naturally weave stories about their experiences, the task of narrating psychotherapy is a particularly challenging endeavor, for this episode is generally unplanned, often emotionally difficult, and typically not a part of individuals' ideal future scripts. And yet the incorporation of the therapy chapter into one's ongoing personal story serves to integrate the work into their identity, thus facilitating continued progress (Frank, 1961; Spence, 1982). This task may therefore be one of the more important narrative challenges some people face in constructing their self-stories, and this study suggests that not everyone will be equally successful at it. Those individuals at higher stages of ego development, who tend to experience themselves and their social world in nuanced and complex ways, constructed coherent stories about their experiences in psychotherapy. In contrast, the therapy stories of participants at lower stages of ego development, those who tend to make meaning in simpler, less differentiated, and more socially conventional ways, fell short on the fundamental story criterion of coherence. These narratives were lacking in several of the basic qualities that would qualify them as viable stories. This reliably rated difference is striking. Compare the following two examples in which participants spontaneously singled out their first session of therapy as one of their most important sessions:

I would say that the first session, when my suspected diagnosis was finally confirmed, stands out as most significant. It was a great relief to speak with someone who knew of my condition and had worked with it before. It was also a great relief to be clear on what it was that I had been dealing with for so long. It was then that I first began to feel that there might be some possibility of being able to cope with my condition.

One of my most important sessions was the first one—that made me realize that I really needed help. So that’s why I consider the first session the most important one. The therapist I did like because she was like a sergeant. However, it did take me a while to get used to her, until I realized that she was not the enemy. She was straight-forward with me.

The first example, from a high-stage ego development participant, is quite coherent. In this brief excerpt he guides the reader from the past (suspecting that he had a diagnosable condition), through the powerful first session, and points to the hope it instilled in him for the future. He also draws clear connections between the events and his emotional reactions (“great relief”) and personal insights gained (“clear on what it was that I had been dealing with”) from them.

In contrast, the second example, from a low-stage ego development participant, is less coherent. It is confusing to read that this man has already sought support by pursuing therapy, yet also learn that he identifies the first session as the moment when he realized that he needed help. His second sentence strives to summarize his singling out of this particular session, but the reader is not provided enough information to make use of this attempted clarification. There is no bridge linking the first two sentences, about the importance of this session, and the final three sentences, about his therapist. And while this participant includes his emotional reactions to the events, it is not clear what overall evaluative point he is trying to make. The contrast between these two examples illustrates the fundamental differences in narrative coherence between high- and low-stage ego development participants’ stories of their experiences in psychotherapy. They make clear how individuals able to coherently narrate this experience might be better able to integrate the therapy into their evolving identity and continue to benefit from the work they did there.

In addition, while we were not explicitly able to account for the role of verbal intelligence in our analyses (although word count was not significantly correlated with narrative coherence and the correlation of education and narrative coherence did not remain significant once ego development was entered into the regression equation), these two examples demonstrate how intelligence may not account for our findings. Both of these excerpts discuss similar components of the story (the first session of treatment) and both use similarly sophisticated language. Indeed, the second example also employs the analogy of the “sergeant,” a potential indicator of higher verbal intelligence, yet it was rated as being lower in narrative coherence.

Why might this relationship between ego development and narrative coherence occur? Ego development has been conceived of as a series of lenses through which the individual views the world (Loevinger, 1976). Each successive stage of ego development involves a more complex and differentiated way of making meaning out of one’s experience. Individuals at higher stages of ego development may therefore be more practiced at weaving together seemingly disparate and sometimes conflicting components of experience into a narrative of self than those lower in ego development. This unique ability to find a narrative through-line while embracing the chaotic nature of modern life may translate into our finding that individuals at higher stages of ego development tell more coherent stories about the difficult experience of having been in psychotherapy. Furthermore, previous research on the *life* stories of individuals at differing stages of ego development suggests that people at higher stages tend to emphasize themes of growth, transformation, and change in their narratives (e.g., Bauer & McAdams, 2004a, 2004b; King & Raspin,

2004; King & Smith, 2004; McAdams et al., 1981, 1986; Pals, 2006). Thus, the high-stage ego development participants may have an easier time crafting coherent stories about the challenging experience of psychotherapy that is laden with change, than their low-stage ego development peers. It is important to note, however, that participants did not necessarily need to describe dramatic change in their psychotherapy narratives in order to score highly on any of the measures. It is possible to coherently story psychotherapy that is perceived to involve high or low degrees of actual change. Furthermore, while both ego development and trait Openness have been shown to have weak to moderate correlations with verbal intelligence (Westenberg & Block, 1993), it is unlikely that intelligence represents a third variable that could explain the present findings. Indeed, in our sample neither word count nor education level accounted for the relationship between ego development and coherence.

There was one finding in the present study that was unexpected in light of previous research: the study did not find a significant correlation between narrative coherence and well-being, as has been reported elsewhere (Baerger & McAdams, 1999). Any feasible explanation for this null result would require replication before a reliable interpretation can be made. Nonetheless, it is possible that the sample included in the present study had lower average levels of well-being than those used in other samples and that this introduced a floor effect into the otherwise significant relationship between narrative coherence and well-being. Indeed, the present sample of ex-psychotherapy clients was slightly below the possible average on our indices of well-being and was slightly elevated on our indices of psychopathology relative to a normal community sample. One could also assert that it might be psychologically protective *not* to develop a coherent story surrounding the patient role – that there would be some psychological benefit to well-being to keep this episode an “untold tale.” It seems likely that, given their content, psychotherapy stories may be narrated with less frequency than other types of personally relevant stories, and rehearsal has been shown to relate to story quality and importance (Thorne, Cutting, & Skaw, 1998). This interpretation runs counter to the theoretical argument put forth by Frank (1961) and Spence (1982) that the storying of the psychotherapeutic experience is vital for the continued well-being of the client once treatment has ended, yet it remains an empirical possibility.

The central finding of the present study offers a potentially important focus for future research on the place of psychotherapy in the minds of former clients. Frank (1961) and others (e.g., Spence, 1982) asserted that the storying of psychotherapy is critical to the continued functioning of the individual once treatment has ended. We have identified a personality-level variable—ego development—that may explain which individuals more successfully accomplish this task. While practicing therapists may or may not directly assess their patients’ level of ego development, the present study suggests that they may want to explicitly discuss how their clients will reconstruct the experience after the therapy concludes and to help them craft coherent narratives. Given the special importance of psychotherapy narratives to former clients (Frank, 1961; Lieblich, 2004; Spence, 1982), it is possible that the observed relationship between ego development and coherence in these stories may not hold true for other types of stories, especially those that figure less prominently in people’s understanding of their own personality development.

In addition, the results have implications for future research on personality. The present study points to ego development as a fundamental construct in future research on personal narratives. Most quantitative narrative research involves the coding of

written or spoken text as a way of operationalizing the particular constructs of interest (McAdams, 2001). Without a doubt, more coherent narratives are easier to code, regardless of the construct being assessed. To identify a redemption sequence (e.g., McAdams et al., 2001) or an instance of depressogenic attributional style (e.g., Adler et al., 2006), one must first be able to interpret the narrative. Lower levels of each of the four indices of coherence make this task more challenging and therefore reduce the possibility that less coherent narratives will produce code able sequences. In light of the relationship between ego development and narrative coherence identified in the present study, it seems possible that ego development is a latent construct influencing much of the work on narrative. The present study indicates that individuals at higher stages of ego development tell more coherent narratives. Given that more coherent narratives are easier to code, we posit that the narratives of individuals at higher stages of ego development may be differentially weighted in research on personal narratives. This is a broad claim and it is certainly premature to adopt it without replication of the present finding. Indeed, there may be something unique about narratives of psychotherapy that highlight the impact of ego development on narrative coherence. Nonetheless, it suggests that ego development should more often be assessed and taken into consideration in future work on life narratives.

In sum, the present study is the first to identify a personality-level construct that is associated with the overall coherence of psychotherapy narratives. These stories capture an especially significant episode in the life (Lieblich, 2004) and their viable narration supports the individuals' continued functioning once treatment has ended (Frank, 1961; Spence, 1982). The results of this study suggest that individuals at high stages of ego development may be the most successful in crafting coherent psychotherapy narratives, for they possess the kind of complex frameworks for meaning-making that are especially well-suited for making good sense of the challenging experience of going to psychotherapy.

Acknowledgments

The research was supported by a grant to the third author from the Foley Family Foundation to establish the Foley Center for the Study of Lives at Northwestern University. We would like to thank Katie Weisz-White, Raelle Wilson, and Katie Magrino-Failla, Lauren Skalina and the rest of the Foley Center for the Study of Lives.

References

- Adler, J. M., Kissel, E. C., & McAdams, D. P. (2006). Emerging from the CAVE: Attributional style and the narrative study of identity in midlife adults. *Cognitive Therapy and Research*, 30(1), 39–51.
- Adler, J. M., & McAdams, D. P. (2007a). Telling stories about therapy: Ego development, well-being, and the therapeutic relationship. In R. Josselson, D. P. McAdams, & A. Lieblich (Eds.), *The meaning of others: Narrative Studies of Relationships*. Washington, DC: APA Books.
- Adler, J. M. & McAdams, D. P. (2007b). *The narrative reconstruction of psychotherapy*, submitted for publication.
- Angus, L. E., & McLeod, J. (2004). Toward an integrative framework for understanding the role of narrative in the psychotherapy process. In L. E. Angus & J. McLeod (Eds.), *The handbook of narrative and psychotherapy: practice, theory, and research*. Thousand Oaks, CA: Sage.
- Baerger, D. R., & McAdams, D. P. (1999). Life story coherence and its relation to psychological well-being. *Narrative Inquiry*, 9, 69–96.
- Bauer, J. J., & McAdams, D. P. (2004a). Growth goals, maturity, and well-being. *Developmental Psychology*, 40, 114–127.

- Bauer, J. J., & McAdams, D. P. (2004b). Personal growth in adults' stories of life transitions. *Journal of Personality, 72*, 573–602.
- Bauer, J. J., McAdams, D. P., & Sakaeda, A. R. (2005). Interpreting the good life: Growth memories in the lives of mature, happy people. *Journal of Personality and Social Psychology, 88*, 203–217.
- Baumeister, R. F. (1994). The crystallization of discontent in the process of major life changes. In T. F. Heatherton & J. L. Weinberger (Eds.), *Can personality change?* (pp. 281–297). Washington DC: American Psychological Association.
- Brandtstadter, J. (1999). The self in action and development: Cultural, biosocial, and ontogenetic bases of intentional self-development. In J. Brandtstadter & R. M. Lerner (Eds.), *Action and self-development: Theory and research through the life span* (pp. 37–66). Thousand Oaks, CA: Sage.
- Bruner, J. S. (1990). *Acts of meaning*. Cambridge, MA: Harvard University Press.
- Derogatis, L. R., Lipman, R. S., Rickels, K., Uhlenhuth, E. H., & Covi, L. (1974). The Hopkins Symptom Checklist (HSC): A self-report symptom inventory. *Behavioral Sciences, 19*, 1–15.
- Diener, E., Emmons, R. A., Larson, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71–76.
- Dimaggio, G., & Semerari, A. (2004). Disorganized narratives: The psychological condition and its treatment. In L. E. Angus & J. McLeod (Eds.), *The handbook of narrative and psychotherapy* (pp. 263–282). London: Sage.
- Elkind, D. (1981). *Children and adolescents* (3rd ed.). New York: Oxford University Press.
- Elliott, R., & James, E. (1989). Varieties of client experience in psychotherapy: An analysis of the literature. *Clinical Psychology Review, 9*, 443–467.
- Frank, J. D. (1961). *Persuasion and healing: A comprehensive study of psychotherapy*. Baltimore, MD: Johns Hopkins University Press.
- Habermas, T., & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence. *Psychological Bulletin, 126*, 748–769.
- Howard, G. (1991). Culture tales: A narrative approach to thinking, cross-cultural psychology, and psychotherapy. *American Psychologist, 40*(3), 187–197.
- Hy, L. X., & Loevinger, J. (1996). *Measuring ego development* (2nd ed.). Mahwah, N.J.: Lawrence Erlbaum Associates.
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. Pervin & O. P. John (Eds.), *Handbook of personality: theory and research* (2nd ed., pp. 102–138). New York: Guilford Press.
- King, L. A., & Raspin, C. (2004). Lost and found possible selves, subjective well-being, and ego development in divorced women. *Journal of Personality, 72*, 603–632.
- King, L. A., Scollon, C. K., Ramsey, C., & Williams, T. (2000). Stories of life transition: Subjective well-being and ego development in parents of children with Down Syndrome. *Journal of Research in Personality, 34*, 509–536.
- King, L. A., & Smith, N. G. (2004). Gay and straight possible selves: Goals, identity, subjective well-being, and personality development. *Journal of Personality, 72*, 967–994.
- Labov, W. (1972). *Language in the inner city*. Philadelphia: University of Pennsylvania Press.
- Lieblich, A. (2004). The place of psychotherapy in the life stories of women in households without men. In A. Lieblich, D. P. McAdams, & R. Josselson (Eds.), *Healing plots: the narrative basis of psychotherapy* (pp. 171–188). Washington, DC: American Psychological Association.
- Loevinger, J. (1976). *Ego development*. San Francisco: Jossey-Bass.
- Loevinger, J., & Wessler, R. (1970). *Measuring ego development. Construction and use of a sentence completion test* (Vol. 1). San Francisco, CA: Jossey-Bass.
- Lysaker, P. H., Davise, L. W., Hunter, N. L., Nees, M. A., & Wickett, A. (2005). Personal narratives in schizophrenia: Increases in coherence following five months of vocational rehabilitation. *Psychiatric Rehabilitation Journal, 29*(1), 66–68.
- Lysaker, P. H., Lancaster, R. S., & Lysaker, J. T. (2003). Narrative transformation as an outcome in the psychotherapy of schizophrenia. *Psychology and Psychotherapy: Theory, Research and Practice, 76*, 285–299.
- Lysaker, P. H., Wickett, A. M., Campbell, K., & Buck, K. D. (2003). Movement towards coherence in the psychotherapy of schizophrenia: A method for assessing narrative transformation. *The Journal of Nervous and Mental Disease, 191*(8), 538–541.
- Mandler, J. (1984). *Stories, scripts, and scenes: Aspects of schema theory*. Hillsdale, NJ: Lawrence Erlbaum.
- McAdams, D. P. (1985). *Power, intimacy, and the life story: Personological inquiries into identity*. New York: Guilford Press.

- McAdams, D. P. (1993). *The stories we live by: Personal myths and the making of the self*. New York: William Morrow.
- McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology*, 5, 100–122.
- McAdams, D. P. (2006a). *The redemptive self: Stories Americans live by*. New York: Oxford University Press.
- McAdams, D. P. (2006b). The problem of narrative coherence. *Journal of Constructivist Psychology*, 19, 109–125.
- McAdams, D. P., Anyidoho, N. A., Brown, C., Huang, Y. T., Kaplan, B., & Machado, M. A. (2004). Traits and stories: Links between dispositional and narrative features of personality. *Journal of Personality*, 72, 761–784.
- McAdams, D. P., Booth, L., & Selvik, R. (1981). Religious identity among students at a private college: Social motives, ego stage, and development. *Merrill-Palmer Quarterly*, 27, 219–239.
- McAdams, D. P., Josselson, R., & Lieblich, A. (2006). *Identity and story: Creating self in narrative*. Washington, DC: American Psychological Association.
- McAdams, D. P., Reynolds, J., Lewis, M., Patten, A., & Bowman, P. T. (2001). When bad things turn good and good things turn bad: Sequences of redemption and contamination in life narrative, and their relation to psychosocial adaptation in midlife adults and in students. *Personality and Social Psychology Bulletin*, 27, 472–483.
- McAdams, D. P., Ruetzel, K., & Foley, J. M. (1986). Complexity and generativity at midlife: Relations among social motives, ego development, and adults plans for the future. *Journal of Personality and Social Psychology*, 50, 800–807.
- McCrae, R. R., & Costa, P. T. Jr., (1980). Openness to experience and ego level in Loevinger's sentence completion test: Dispositional contributions to developmental models of personality. *Journal of Personality and Social Psychology*, 39, 1179–1190.
- Pals, J. L. (2006). Authoring a second chance in life: Emotion and transformational processing in narrative identity. *Research in Human Development*, 3, 101–120.
- Pasupathi, M. (2001). The social construction of the personal past and its implications for adult development. *Psychological Bulletin*, 127, 651–672.
- Raggatt, P. (2006). Putting the five-factor model into context: Evidence linking Big Five traits to narrative identity. *Journal of Personality*, 74(5), 1–27.
- Roe, D. (2001). Exploring the relationship between the person and the disorder among individuals hospitalized for psychosis. *Psychiatry*, 62, 372–380.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well being. *Annual Review of Psychology*, 52, 141–166.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69, 719–727.
- Singer, J. A. (2005). *Personality and psychotherapy: Treating the whole person*. New York: Guilford Press.
- Spence, D. P. (1982). *Narrative truth and historical truth: Meaning and interpretation in psychoanalysis*. New York: W.W. Norton.
- Thorne, A. (2000). Personal memory telling and personality development. *Personality and Social Psychology Review*, 4, 45–56.
- Thorne, A., Cutting, L., & Skaw, D. (1998). Young adults' relationship memories and the life story: Examples or essential landmarks? *Narrative Inquiry*, 8(2), 237–268.
- Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005). Twelve-month use of mental health services in the United States: Results from the national comorbidity survey replication. *Archives of General Psychiatry*, 62(6), 629–640.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS Scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070.
- Wayment, H. A. & Bauer, J. J. (in press). *Quieting the ego: Toward a scientific psychology of transcending egoism*. Washington, DC: American Psychological Association.
- Westenberg, M., Blasi, A., & Cohn, L. D. (Eds.). (1998). *Personality development: Theoretical, empirical, and clinical investigations of Loevinger's conception of ego development*. Mahwah, NJ: Lawrence Erlbaum.
- Westenberg, P. M., & Block, J. (1993). Ego development and individual differences in personality. *Journal of Personality and Social Psychology*, 65, 792–800.