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

Dan P. McAdams
Jeffrey Reynolds
Martha Lewis
Northwestern University

Allison H. Patten
Vanderbilt University

Phillip J. Bowman
University of Illinois at Chicago

Midlife adults (age 35 to 65) and college undergraduates provided lengthy, open-ended narrative accounts of personally meaningful episodes from the past, such as life-story high points, low points, turning points, and earliest memories. The oral (adult) and written (student) narratives were coded for redemption and contamination imagery. In the midlife sample, adults scoring high on self-report measures of generativity showed significantly higher levels of redemption and lower levels of contamination sequences. In both samples, redemption sequences in life narrative accounts were positively associated with self-report measures of psychological well-being, whereas contamination sequences predicted low levels of well-being among midlife adults. In addition, redemption sequence scores were a stronger predictor of well-being than were ratings of the overall affective quality of life-narrative accounts. The results are discussed with respect to the empirical literature of benefit-finding in the face of adversity and in the context of the recent upsurge of interest in the collection and interpretation of life narratives.

$\mathbf{T}$he purpose of this investigation is to identify two distinctive narrative forms or strategies that people employ in constructing their life stories and to document empirical associations between these two narrative strategies on one hand and indices of psychosocial adaptation on the other. The two strategies concern how people make narrative sense of personal experiences that entail significant transformation in affect. In a redemption sequence, the storyteller depicts a transformation from a bad, affectively negative life scene to a subsequent good, affectively positive life scene. The bad is redeemed, salvaged, mitigated, or made better in light of the ensuing good. By contrast, a contamination sequence involves the move from a good, affectively positive life scene to a bad, affectively negative life scene. The good is spoiled, ruined, contaminated, or undermined by what follows it.

Redemption and contamination sequences were initially described by McAdams, Diamond, de St. Aubin, and Mansfield (1997) in their examination of the life stories of highly generative adults; that is, adults with a strong concern for and commitment to promoting the well-being of youth and the next generation. In that interview study, McAdams et al. (1997) showed that highly generative adults (those scoring high on a set of objective indices assessing individual differences in

generativity) were significantly more likely than less-generative adults to narrate their lives in ways that more closely resembled the overall form of a commitment story. In the prototypical commitment story, the protagonist (a) enjoys an early family blessing or advantage, (b) is sensitized to others' suffering at an early age, (c) is guided by a clear and compelling personal ideology that remains relatively stable over time, (d) sets goals for the future to benefit society, and (e) transforms or redeems bad scenes into good outcomes (redemption sequence). The redemption sequence, therefore, was identified as one of five central features of the commitment story. McAdams et al. (1997) also coded the opposite sequence, that is, when good things turn bad, terming it a "contamination sequence" (after Tomkins, 1987). Highly generative adults were significantly less likely than less-generative adults to narrate their lives via contamination sequences.

Generativity is one index of psychosocial adaptation in the midlife years (Erikson, 1963). The findings from McAdams et al. (1997), therefore, suggest that redemption and contamination sequences in life narrative may be implicated in psychosocial adaptation in adulthood. Might these styles of narrating one's life story be likewise associated with measures of life satisfaction, self-esteem, and depression? The current investigation seeks to replicate the association between generativity and narrative styles in a new sample of midlife adults and to extend the inquiry to examine assessments of subjective well-being among both midlife adults and college undergraduates. This investigation, then, focuses on the relation between the psychosocially constructed autobiographical self (Singer & Salovey, 1993) and the psychosocial quality of life among young and middle-age adults.

Personality and the Life Story

The current study follows McAdams's (1994, 1996) framework for understanding the relation between life stories and personality. McAdams argued that personality is best conceived as a loose assemblage of constructs situated in three different domains—the domains of (a) dis-positional traits, such as those subsumed within the Big Five framework (McCrae & Costa, 1990); (b) contextualized concerns and adaptations, such as life goals, developmental tasks, defenses, motives, strategies, skills, and values; and (c) integrative and internalized life stories. In simple terms, the traits of Domain 1 provide a dispositional signature of a person; the contextualized constructs of Domain 2 provide the texture and richness needed to understand human individuality in specific terms; and the life stories of Domain 3 specify how an individual provides his or her life with overall meaning, unity, and purpose. A life story is an individual's internalized narrative rendering of his or her life in time, entail-ing the reconstructed past, perceived present, and anticipated future. More than traits, motives, values, and so on, life stories function to establish identity (McAdams, 1985), in that a story is the best available structure that persons have for integrating and making sense of a life in time (Bruner, 1990; Sarbin, 1986). Thus, Domain 3 in personality is the domain of identity.

Individuals' life stories, or identities, are based on the facts of their lives, but life stories are not synonymous with those facts, because making one's life into a story is as much an act of imagination as is the production of fiction, poetry, and art (Cohler, 1982). Beginning in late adolescence and young adulthood, most people in modern societies formulate initial narrative understandings of themselves and their roles in society to provide their lives with a semblance of unity and purpose and establish a meaningful psychosocial niche (McAdams, 1985, 1993). The process of identity-making through life story–construction continues throughout most of the adult life course as people refashion their internalized narratives of self to accommodate various on-time and off-time changes in life. The process is profoundly shaped by the cultural rules and traditions concerning good lives and good stories to which the person is exposed (Denzin, 1989). Thus, a life story exists as a psychosocial construction (McAdams, 1996), reflecting an individual's narrative understanding of self in culture, an understanding that itself is jointly authored by the individual himself or herself and by the wide variety of cultural influences providing the historical, religious, ethical, economic, and political contexts within which the individual's life is situated.

According to Tomkins (1987), an important individual difference in life stories (what Tomkins termed "scripts") is the ratio in the density of positive to negative affect expressed in reconstructed life scenes over time. Limitation-remediation scripts link together scenes in which negative affect promises to give way to positive, whereas contamination scripts link together scenes in which positive affect gives way to negative. A limitation-remediation script begins with an "imperfect" state of affairs—a negative-affect situation, wherein the protagonist of the story must suffer in some way (Tomkins, 1987, p. 166). Over time, the protagonist seeks to undo the suffering, improve or redeem the situation, and move forward to a positive-affect state. Along the way to redemption, the protagonist may absorb a great deal of negative affect, but the hope for and anticipation of an ultimate reward keep the protagonist going. In sharp contrast, a contamination script entails movement from positive to negative affect. Tomkins (1987) described a wide variety of such moves in narrative, but all have in common a sense that something clearly positive has been irrevocably spoiled or ruined. The protagonist may seek to undo

the damage and reexperience the initial state of good-ness, but such efforts are doomed to failure, or at best half-successes. Tomkins wrote that in a contamination sequence, although the protagonist

> may win battles she loses the war, though she may see the promised land she may never live in it. Her great benefits are paid for with great suffering and at great risk, which she has no choice but to accept for the benefits she can neither permanently possess nor renounce. (p. 168)

Coping With Adversity

The relation between suffering and benefits is high-lighted in a growing empirical literature on how people cope with naturally occurring negative events in their lives, including a number of studies examining the extent to which people interpret negative events in ways that suggest that benefits may come out of adversity (Affleck & Tennen, 1996; Taylor, 1983). Whereas a negative life event—involving, say, illness, trauma, or bereavement—may bring considerable pain and misfortune, many people will conclude that something good came or will come from the adversity. The take-home message from the empirical literature on benefit-finding is that people who perceive benefits in adversity tend to show better recovery from and adjustment to the negative events that brought them the adversity in the first place. For example, empirical evidence suggests that benefit-finding relates to less negative affect in cancer patients (Wollman & Felton, 1983), less depression and greater meaningfulness in life in stroke victims (Thompson, 1991), less psychological distress in infertile women (Abbey & Hallman, 1995; Tennen, Affleck, & Mendola, 1991), superior psychological adjustment in women with breast cancer (Taylor, Lichtman, & Wood, 1984), and less mood disturbance and intrusive thoughts in moth-ers of acutely ill newborns (Affleck, Tennen, & Gersh-man, 1985).

Survivors of illness and trauma often report increased self-reliance and broader self-understanding, enhanced self-disclosure and emotional expressiveness in relation-ships, and a changed philosophy of life (Tedeschi & Calhoun, 1995). Major setbacks in life can challenge a person's assumptive world, but benefit-finding can help to reconstitute that world by specifying an anticipated redemption sequence wherein bad events are expected to give way to good outcomes. According to Tedeschi and Calhoun, those good outcomes often manifest themselves as growth in one or more of three different areas: (a) changes in self, (b) changes in relationships with others, and (c) changes in philosophy of life and spiritual/existential beliefs. According to Janoff-Bulman (1992), "By engaging in interpretations and evaluations that focus on the benefits and lessons learned, survivors

emphasize benevolence over malevolence, meaningfulness over randomness, and self-worth over self-abasement" (p. 133). Therefore, similar to the limitation-remediation scripts identified by Tomkins (1987), construals of benefits amid the adversity of illness or trauma provide hope and sustain anticipations of a positive-affect future. These kinds of adaptive construals would appear to suggest the enactment of life narratives of personal redemption, narratives that themselves may be associated with better overall adaptation.

The Current Investigation

Whereas research on benefit-finding focuses on the aftermath of especially adverse events in people's lives, the current investigation gives individuals wide latitude to narrate many different kinds of significant scenes from their past. The researchers then code the open-ended narrative accounts for redemption and con-tamination sequences as they occur naturally and spon-taneously in life stories. The investigation examines the adaptational implications for individuals of narrating one's life in terms of redemption and contamination sequences.

The first study focuses on life-story interviews col-lected from 74 midlife adults, approximately half of whom scored very high on measures of generativity and half of whom scored low. Self-report measures of life sat-isfaction, self-esteem, depression, and sense of coher-ence also are administered. The researchers code eight key scenes in the interviews for redemption and contam-ination sequences and relate those scores to the assess-ment of generativity and the measures of well-being. In the second study, 125 college students provide extended written accounts of 10 key scenes in their lives, which are coded for redemption sequences and for overall affec-tive quality. These life-narrative indices are then corre-lated with a battery of self-report measures assessing well-being in life.

STUDY 1

In an intensive examination of lengthy life-story accounts provided by 40 highly generative and 30 less-generative adults, McAdams et al. (1997) found that among the thematic differences revealed in the two groups of life stories was a greater preponderance of redemption sequences in the stories produced by the 40 adults high in generativity. Study 1 serves as a replication and extension of McAdams et al. (1997). The study assesses the extent to which two contrasting groups of midlife participants—one chosen by virtue of high scores on measures of generativity and one chosen by vir-tue of especially low scores—show different patterns of redemption and contamination in their life narrative accounts. Approximately half of the participants, fur-

thermore, are African American and half are White, as part of a larger investigation of generativity among Black and White Americans (Hart, McAdams, Hirsch, & Bauer, in press). In addition, the study tests the hypothesis that redemption sequences should be positively associated and contamination sequences negatively associated with indices of subjective well-being among adults. The hypothesis is consistent with the research on benefit-finding amid trauma and illness (Affleck & Tennen, 1996) and flows logically from the depiction of the redemption sequence as a narrative form that sustains hope and commitment (McAdams et al., 1997; Tomkins, 1987).

Method

Participants. Study 1 employs interview data from a sample of 74 adults who participated in a large research project examining generativity among African American and Anglo-American adults (Hart et al., in press). All 269 participants in the original project were between the ages of 35 and 65 and reported an annual family income of less than $100,000 at the time of the study (1995 or 1996). They completed a large packet of measures examining demographics, parenting, friendships and social support, political and religious involvements, and community volunteerism, as well as measures of generativity and well-being. Out of the original participant pool, 74 adults were individually interviewed in a second part of the original investigation. The 74 adults were chosen to be interviewed by virtue of their scores on three different measures of generativity: the Loyola Generativity Scale (LGS) (McAdams & de St. Aubin, 1992), the Generative Behavior Checklist (GBC) (McAdams & de St. Aubin, 1992), and Generative Strivings (McAdams, de St. Aubin, & Logan, 1993).

The LGS is a 20-item self-report scale designed to measure individual differences in generative concern, or the adults' conscious concern for having a positive effect on the next generation. The scale includes such items as "I try to pass along knowledge I have gained through my experience" and "I feel as though my contributions will exist after I die." The scale shows high internal consistency (Cronbach's alphas of .82 and .83) and adequate test-retest reliability (.73 over a 3-week span) (McAdams & de St. Aubin, 1992). LGS scores have been shown to be positively correlated with measures of generative acts, strivings for generativity in daily life, and themes of generativity in autobiographical recollections (McAdams & de St. Aubin, 1992; McAdams et al., 1993), as well as with Q-sort ratings depicting a highly generative person as determined in interviews (Himsel, Hart, Diamond, & McAdams, 1997), with behaviors indicative of constructive parenting and prosocial community involvement, and with self-report measures of psycho-

logical well-being (Cole & Stewart, 1996; Keyes & Ryff, 1998; McAdams, Hart, & Maruna, 1998).

The GBC contains 50 items phrased as behavioral acts, of which 40 are deemed to be acts suggestive of generativity (e.g., "taught somebody a skill," "read a story to a child," "donated blood," "produced a piece of art or craft") and 10 are neutral filler acts (e.g., "went to a party"). On the behavior checklist, the participant responds to each act by specifying how often during the previous 2 months he or she had performed the given act. The participant marks "0" if the act has not been performed during the previous 2 months, "1" if the act has been performed once during that period, and "2" if the act has been performed more than once during the previous 2 months. Individual act scores are summed across the 40 generativity items to arrive at a total score for generativity acts. Previous research has indicated that generativity act scores correlate significantly with scores on the LGS and other measures of generativity (McAdams & de St. Aubin, 1992; McAdams et al., 1993).

To assess generativity strivings or goals, the study employed the personal strivings procedure devised by Emmons (1986) and used in previous research on generativity (McAdams et al., 1998). Participants were asked to write a sentence describing each of 10 personal strivings. The responses were coded by two independent scorers, blind to identifying information on the participants, for generativity goals, according to a procedure used in McAdams et al. (1993). Interscorer reliability was $r = .83$.

To arrive at two contrasting subsamples of adults, one scoring especially high and one especially low on generativity, the researchers called back participants who scored at least 1 standard deviation above or 1 standard deviation below the mean on at least two of the three generativity measures. These individuals were asked to participate in a life-story interview. The procedure netted 40 adults high in generativity (21 Black and 19 White) and 34 low in generativity (14 Black and 20 White). Of the 74 participants, 40 were women (54%) and 34 were men (46%). Table 1 provides a demographic breakdown for the two groups. As can be seen, the two generativity groups did not differ significantly on age, income, or education levels. However, the highly generative adults were more likely to be in intact marriages (70%) compared with the adults in the low-generativity sample (47%), although the difference only approached statistical significance, $\chi^2(1) = 3.08, p < .10$.

Redemption and contamination sequences. The 74 participants were each interviewed according to McAdams's (1985) life-story technique. The interview begins by asking the participant to think about his or her life as if it were a book and to divide the book into chapters. Next, the participant is asked to describe eight specific scenes

TABLE 1:   Characteristics of Two Groups in Study 1

	High Generativity	Low Generativity
N	40	34
Female/male	21/19	19/15
Black/White	21/19	14/20
Mean age	51.3 (8.58)	48.0 (8.60)
Median family income	$50-60K	$40-50K
Education level[a]	4.08	3.70
Percentage currently married	70	47
Loyola Generativity Scale	49.6 (3.99)	30.9 (4.44)***
Generative Behavior Checklist	36.3 (10.0)	26.0 (9.1)***
Generative Strivings	3.6 (2.0)	1.8 (1.3)***

NOTE: Standard deviations are in parentheses.
a. Education level was coded on a 5-point scale where 1 = *below high school*, 2 = *high school graduate*, 3 = *some college*, 4 = *college degree* (bachelor's), and 5 = *master's degree or higher graduate degree*.
***$p < .001$ for difference between group means.

in the story: high point (peak experience), low point (nadir experience), turning point, earliest memory, important childhood scene, important adolescent scene, important adult scene, and other important scene. Following the eight scenes, the participant moves through a series of sections and questions concerning important characters in the story, future chapters, fundamental beliefs and values, and life-story motifs and messages. The interview requires approximately 2 hours to complete. Each taped interview was transcribed verbatim.

Coding for redemption and contamination sequences focused on the eight key life-story scenes. For each scene, the participant was asked to provide a full narrative account of exactly what happened in the scene, who was involved, what he or she was thinking and feeling at that time, and what, if anything, the scene says about his or her life (in other words, what the scene may mean in the context of the overall life story). Each of the eight accounts was coded for redemption sequences by two independent coders.

A redemption sequence was defined as an explicit transformation in the story from a decidedly negative-affect state to a decidedly positive-affect state. Evidence for the negative state had to be clear and explicit. The participant needed to describe some situation, period, or event in life in which he or she suffered in some way and experienced pain, fear, sadness, anguish, and so on. To score for a redemption sequence, furthermore, the decidedly negative situation needed either (a) to change into a decidedly positive situation or (b) to produce a positive outcome of some kind. An example of the first type of redemption sequence would be a story of a person's sinking into alcoholism and then making a decision to give up drinking, which subsequently improved his or her life. The negative situation of alcoholism changes into a positive situation of sobriety and happiness. An example of the second form would be a story of a person's suffering through the death of a spouse and then finding later that the process of coping with the grief has made him or her a stronger or more compassionate person. In this instance, the negative event (death) is not changed in any way but a positive outcome nevertheless comes from the negative. Note that the positive outcome need not be stronger in magnitude than the negative event. Redemption sequences occur even in situations in which a relatively catastrophic event (e.g., death, destruction) results in what may be seen as a relatively minor positive outcome (e.g., improvement in attitude, financial security). The scorers assigned one point to an account containing a redemption sequence as defined above.

If the account received one point for redemption imagery, then the scorers moved on to consider three supplementary subcategories, each of which received one point for its presence or no points for absence. The three supplementary themes are viewed as bonus points to be added for especially compelling or powerful redemption accounts. The three were derived from Tedeschi and Calhoun's (1995) conceptualization of posttraumatic growth. According to these researchers, people often report positive growth in three different areas following personal catastrophes: (a) self, (b) relationships, and (c) spiritual/religious beliefs. For the current study, three corresponding subcategories for redemption were developed: (a) enhanced agency, (b) enhanced communion, and (c) ultimate concerns.

Corresponding to Tedeschi and Calhoun's category of growth in self, enhanced agency was defined as the participant's explicit report of enhanced self-efficacy, strength, confidence, or self-understanding that directly resulted from the change from negative to positive affect state. The coder added one point to the redemption score if the respondent explicitly reported that as an additional result of the move from negative to positive in the account, he or she experienced enhanced personal agency. For example, an account in which the protagonist moves from an addicted to a recovered state with respect to alcohol would code for redemption imagery. If in addition to the recovery the respondent reported that he or she experienced enhanced personal agency as a result (e.g., I became a stronger person; I became more effective in the workplace), the account would receive a second point, for enhanced agency. Corresponding to their category of relationships, communion enhancement was defined as the participant's explicit report of enhanced interpersonal intimacy, love, friendship, caring, or feeling a sense of community with others that directly resulted from the change from negative to positive affect state. As in the case of enhanced agency, this

subcategory was scored as +1 only when enhanced communion was reported as an additional benefit resulting from the redemptive move in the story. Corresponding to spiritual/religious beliefs, the category of ultimate concern referred to the participant's description of transcendent or spiritual meaning associated with the change from negative to positive affect state or of any confrontation with fundamental existential issues, including death.

Two independent coders, blind to identifying information on each subject, scored each of the eight narrated episodes described by each of the 74 participants for redemption imagery. Correlating their independent total scores (summed across the eight key scenes) for each subject resulted in a reliability coefficient for redemption coding of +.84.

Contamination sequences were scored in a manner similar to that used for the primary category of redemption sequences. Each of the eight scenes was coded for the presence (score +1) or absence (score 0) of a move in the narrative account from a clearly positive scene to a very negative outcome. To receive a score of +1 for contamination, the account had to explicitly state that the beginning of the episode in question was affectively positive and that this positive state was followed by a clearly negative outcome. Contamination sequence scores were summed across the eight episodes to arrive at a total contamination score for the eight scenes, ranging hypothetically from 0 (*no contamination sequences in any of the eight scenes*) to 8 (*each of the eight showed a contamination sequence*). Scoring reliability for two independent coders, blind to identifying information on the subjects, was +.79. Disagreements between the coders were resolved by a third trained coder who was blind to identifying information on the participants.

Well-being. Four measures of overall well-being were employed, assessing satisfaction with life, self-esteem, depression, and sense of coherence in life. The Satisfaction With Life Scale (SWLS) is a 5-item scale designed to assess overall satisfaction with life (Diener, Emmons, Larson, & Griffin, 1985). Self-esteem was assessed through six items drawn from the Rosenberg (1965) Self-Esteem Questionnaire. Depression was assessed with the Center for Epidemiologic Studies Depression Scale (CES-D). The CES-D contains 20 items assessing depressive symptoms. For each item, the participant responds on a 4-point scale concerning the extent to which he or she has felt the particular affective expression described (e.g., "I felt fearful," "I had crying spells") during the past week. The CES-D is a widely used and well-regarded instrument in survey studies of stress and coping and psychological well-being among adults (Lewinsohn, Seeley, Roberts, & Allen, 1997). Sense of Coherence (SOC) was assessed according to Antonovsky's

(1987) 29-item scale, which measures the extent to which a person feels that the challenges faced in life are comprehensible, manageable, and meaningful. Persons who score high on SOC are able to comprehend and make sense of life challenges, are able to cope with the challenges and manage effectively the attendant stress, and find these challenges to be meaningful and rewarding. Evidence for reliability and construct validity of this scale is reported in Frenz, Carey, and Jorgensen (1993).

Results and Discussion

Total scores on redemption sequences summed across the eight scenes ranged from 0 to 11 ($M = 2.92$, $SD = 2.88$). Contamination sequence scores summed across the eight scenes ranged from 0 to 6 ($M = 1.20$, $SD = 1.12$). As might be expected, narrative accounts of turning point events showed the highest levels of redemption sequences, followed by high points and low points. Earliest memories showed the lowest scores. Interestingly, turning point accounts showed relatively low scores for contamination sequences. Instead, the move from positive to negative affect states showed up most commonly in narrative accounts of low-point events and adolescent events, followed by high points, childhood memories, and earliest memories. Even in low-point events, however, contamination sequences were relatively rare. Redemption imagery was much more common in these life-narrative interviews than was contamination imagery. Total scores on redemption and contamination sequences were significantly, although modestly, negatively associated, $r(72) = -.25$, $p < .05$.

As a replication of McAdams et al. (1997), the first hypothesis of Study 1 was that highly generative adults should construct life-narrative scenes with higher levels of redemption imagery and lower levels of contamination imagery compared with adults who are low in generativity. The hypothesis was strongly confirmed. Adults in the high-generativity group constructed life-narrative scenes whose redemption scores were more than 4 times as high as the redemption scores obtained for life-narrative scenes constructed by low-generativity adults. Conversely, low-generativity adults constructed life-narrative scenes with contamination scores more than 2 times as high as those obtained from the life-narrative scenes produced by high-generativity adults. A series of three-way ANOVAs was conducted, using generativity group (high vs. low), gender, and race/ethnicity (Black vs. White) as independent grouping variables and the narrative theme scores as dependent variables. Main effects for generativity group were highly significant in all of the analyses, $F(1, 66) = 37.69$, $p < .001$, for total redemption scores; $F(1, 66) = 31.04$, $p < .001$, for redemption imagery; $F(1, 66) = 12.68$, $p < .01$, for the subcategory of enhanced agency; $F(1,$

66) = 14.48, $p < .001$, for the subcategory of enhanced communion; $F(1, 66) = 15.02$, $p < .001$, for the subcategory of ultimate concerns; and $F(1, 66) = 9.88$, $p < .01$, for total contamination sequences. No other significant main effects or interaction effects were obtained.

Table 2 shows correlations between redemption and contamination scores on one hand and self-report measures of psychological well-being on the other. As predicted, redemption scores in life-narrative episodes were significantly associated with all four measures of psychological well-being, from a high of $r = +.37$ ($p = .001$) for satisfaction with life to a low of $r = .28$ ($p < .05$) for self-esteem. Contamination sequence scores strongly predicted depression ($r = .49$, $p < .001$) and were strongly negatively associated with self-esteem ($r = -.56$, $p < .001$) and sense of coherence ($r = -.46$, $p < .001$). The same patterns of results were obtained when analyzing the data separately for men and women and separately for Black and White respondents. In the overall, then, redemption sequences in life narratives were positively associated, and contamination sequences in life narratives were negatively associated, with self-report psychological well-being.

The results on self-esteem bear some further attention. Research suggests that people high in self-esteem are not immune to experiencing negative events in their lives (Blaine & Crocker, 1993), but individuals high in self-esteem may manage to interpret these negative events in relatively positive terms. These kinds of redemptive interpretations, in turn, may help to enhance high levels of self-esteem. It is also worth noting that contamination sequences were most strongly negatively related to self-esteem, suggesting that individuals with high levels of self-esteem are especially reluctant to recall and report negative ramifications or outcomes that may follow from generally positive events.

As has been shown in other studies, the four self-report measures of well-being employed in the current study were themselves highly intercorrelated, providing overlapping assessments of a general tendency to feel good about one's life. The absolute values of the correlations ranged from .53 to .75. In addition, the self-report measures were associated with generativity, as is consistent with previous studies showing modest positive correlations between self-report psychological well-being and self-report generativity (McAdams et al., 1998). In the current study, the two generativity groups also differed significantly from each other on all four of the self-report measures of well-being. As a group, highly generative adults were less depressed, more satisfied with life, showed higher levels of self-esteem, and reported higher levels of life coherence compared with adults in the low-generativity group. Psychological well-being and generativity are surely two key ingredients making up

TABLE 2: Correlations Between Life Narrative Themes and Psychological Well-Being in Study 1

Narrative Themes	Life Satisfaction	Self-Esteem	Coherence	Depression
Redemption	.37**	.28*	.33**	−.32**
Imagery	.36**	.29*	.33**	−.31**
Agency	.31**	.20	.23	−.21
Communion	.31**	.17	.27*	−.23
Ultimate	.15	.11	.13	−.19
Contamination	−.40***	−.56***	−.46***	.49***

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

overall psychosocial adaptation in the mid-adult years (Erikson, 1963; Keyes & Ryff, 1998).

The current data show that midlife adults reporting high levels of adaptation construct life narratives that emphasize the transformation of negative events into positive outcomes, whereas adults low in adaptation are relatively more likely to construct life narrative scenes in which highly positive states give way to negative outcomes. Although strongly related to self-report assessments of generativity and psychological well-being, redemption and contamination sequences in life-narrative scenes prove to be unrelated to gender and race/ethnicity. In simplest terms, the results might be interpreted as showing that happy and well-functioning people tell happy stories about their lives. However, although it is true that redemption sequences affirm hope and positive affect, they also contain within them a good deal of negative affect. For an episode to score for redemption, the move to positive affect must be preceded by what is, at minimum, a highly disagreeable state. There would appear, therefore, to be an important conceptual difference between a life-narrative scene that contains nothing but positive emotion (e.g., a young woman's wedding day, winning a prestigious award, enjoying an afternoon at the beach) and one that codes for redemption (e.g., recovery from alcoholism, gaining autonomy after the death of one's father, experiencing forgiveness after hurting one's spouse). The latter are much rarer in life-story interviews, but they might be expected to hold considerable power and value within the narrative (McAdams, 1993; Tedeschi & Calhoun, 1995). With this distinction in mind, the second study teases apart positive stories and redemptive stories to examine their differential relation to psychological well-being.

STUDY 2

The second study extends the examination of the relation between life-narrative forms and psychosocial adaptation by examining lengthy written accounts of important autobiographical scenes provided by college

students. Because a preliminary analysis of these written data indicated that the college students provided very few accounts that code for contamination sequences, the study will focus exclusively on redemption sequences and the positive-affect qualities of life-narrative episodes. The 10 episodes provided by each participant are each coded for redemption sequences, as in Study 1, and are each rated for overall affect positivity to determine the emotional tone of the episode. The study pits two different features of life narratives—redemption sequences and emotional tone—against each other to determine which is more closely connected to psychosocial adaptation. To determine adaptation among college students, the study employs the life satisfaction measure used in Study 1 as well as Ryff's (1989) more differentiated scheme for determining psychological well-being.

Method

The participants were 125 undergraduate students enrolled in two personality psychology courses taught at Northwestern University in the fall of 1997. Students participated in the study for extra course credit. Participants ranged in age from 18 to 24 years (*M* = 19.8 years). The study included 89 women, 35 men, and 1 respondent who did not indicate gender.

The participants each completed a booklet of measures and questionnaires, requiring between 3 and 6 hours of time. Each student took the booklet home and completed the questionnaires in his or her free time, returning the booklets to the course instructor at the end of a 2-week period. Included within the booklet were instructions for describing 10 key scenes in one's life story, the SWLS (Diener et al., 1985), and Ryff's (1989) six-scale, self-report measure of psychological well-being.

A large section of the booklet was modeled on aspects of the Life Story Interview employed in Study 1. In this section, the participant was asked to describe in detail a particular scene in his or her life. Ten scenes were included: life story high point, low point, turning point, episode of continuity, earliest memory, important childhood scene, important adolescent scene, morality scene, decision-making scene, and goal scene. Six of the scenes were drawn from the eight used in Study 1, whereas four new scenes were introduced: (a) an episode of continuity (a scene that displays something about the self that is continuous and stable), (b) a morality scene (an event in which the participant faced a moral dilemma), (c) a decision-making scene (an event in which the participant made an important decision), and (d) a goal scene (an event connected to an important goal that the participant has set out for the future). For each scene, the participant was provided with a full page on which to write the description of the scene, describing what happened, what he or she was thinking and feeling in the scene, and

what, if anything, the scene may mean for the participant's life story. The participants appeared to be highly motivated in this exercise, typically providing lengthy written accounts that extended onto the backs of the pages and sometimes even included typed inserts.

Each written account was coded for redemption sequences in the manner described in Study 1. Two independent coders, blind to information on the participants, coded the episodes for redemption sequences; interscorer reliability was *r* = +.80. In addition, two coders rated each episode for overall emotional tone, paying special attention to the extent to which the episode showed a happy ending. A 5-point scale was used: a rating of 1 indicated *extremely negative ending, very unhappy story*; 2 indicated *slightly negative ending, generally unhappy story*; 3 indicated *mixed or neutral or indeterminate ending, neither happy nor unhappy story, or both*; 4 indicated *positive ending, generally happy story*; and 5 indicated *very positive ending, extremely happy story*. Interscorer reliability was *r* = +.89.

As in Study 1, the SWLS (Diener et al., 1985) was used. In addition, the participants completed an 84-item version of Ryff's (1989) measure of psychological well-being, which provides well-being scores on six dimensions: autonomy, environmental mastery, personal growth, positive interpersonal relationships, purpose in life, and self-acceptance.

Results and Discussion

A series of *t* tests showed no significant gender differences for any of the variables measured. The measures of psychological well-being were all significantly intercorrelated. The SWLS correlated +.71 with the total mean score of Ryff's psychological well-being. Within Ryff's six-scale system, intercorrelations tended to fall between +.35 and +.50, ranging from a low of +.20 (*p* < .05) between autonomy and positive relationships to a high of +.67 (*p* < .001) between environmental mastery and self-acceptance. With respect to narrative measures, redemption sequences and emotional tone were modestly but significantly positively associated, *r* = +.27, *p* < .01.

Table 3 shows correlations between narrative measures on one hand and self-report measures of well-being on the other. In general, the redemption sequence total scores and the emotional tone scores were positively associated with self-report well-being. Redemption sequences were significantly associated with satisfaction with life (*r* = +.42, *p* < .001), with the total score on Ryff's differentiated measure of well-being (*r* = +.35, *p* < .001), and with five of the six individual scales making up Ryff's total. Two of the four individual scoring categories for redemption sequences tended to show positive and significant associations with well-being on their own (redemption imagery and enhanced agency), whereas the two other categories showed weak relationships over-

TABLE 3:   Correlations Between Life Narrative Measures and Well-Being in Study 2

| | Ryff's Psychological Well-Being | | | | | | | |
	Autonomy	Mastery	Relations	Growth	Purpose	Self-Acceptance	Total	SWLS
Redemption (total)	.13	.27**	.25**	.18*	.32**	.37***	.35***	.42***
Imagery	.10	.29**	.20*	.18*	.28**	.34***	.32***	.38***
Agency	.22*	.25**	.17	.21*	.23*	.32***	.32***	.35***
Communion	.01	.12	.19*	.00	.18*	.18*	.16	.21*
Ultimate concerns	.00	.01	.17	.07	.19*	.15	.14	.24**
Emotional tone	.15	.26**	.17	.17	.20*	.24*	.27**	.26**

NOTE: SWLS = Satisfaction With Life Scale.
*$p < .05$. **$p < .01$. ***$p < .001$.

all (enhanced communion and ultimate concern). Emotional tone scores were positively associated with both satisfaction with life ($r = .26$, $p < .01$) and Ryff's total score ($r = .27$, $p < .01$), although these correlations appear lower in magnitude than those shown for redemption sequence total scores. Emotional tone also was significantly associated with three of Ryff's six subscales.

To determine the relative contributions of redemption sequences and emotional tone in the prediction of psychological well-being, multiple regression analysis was employed. In the first equation, redemption sequence total scores and emotional tone total scores were entered into a simultaneous regression to predict satisfaction with life, as assessed on the SWLS. The results revealed a multiple R of .47, with a highly significant contribution made by redemption sequences ($\beta = 0.410$, $t = 4.56$, $p < .001$). By contrast, emotional tone did not make a significant contribution to accounting for the variance in satisfaction with life ($\beta = 0.147$, $t = 1.63$, $p = .11$). Similarly, redemption sequences and emotional tone were entered into a simultaneous multiple regression equation to predict the overall mean score for Ryff's assessment of well-being. The results in this case revealed a multiple R of .40, with a significant contribution made again by redemption sequences ($\beta = 0.310$, $t = 3.32$, $p < .01$). In this case, however, emotional tone of life narrative scenes also made a significant, although lower in magnitude, contribution ($\beta = 0.186$, $t = 1.99$, $p = .05$).

Overall, the results suggest that themes of redemption in life-narrative scenes are related to but not identical with the overall emotional tone of the scenes. Scores on the two measures, determined from coding of 10 life-narrative scenes provided by college students, tend to be positively associated with each other, although at modest statistical levels. Both coding schemes, furthermore, provide scores that are positively associated with self-report psychological well-being. But the data in Study 2 suggest that those associations are somewhat stronger for redemption sequences, especially in predicting life satisfaction as assessed on a simple 5-item scale (the SWLS), where redemption sequences in life

narrative scenes turn out to be more robust correlates than are the simple codings of the overall emotional tone of the scenes. Focusing on the individual coding categories for redemption sequences, the results from Study 2 suggest that the simple determination of a turn from negative to positive affect in the scene is the strongest element of the coding scheme. Scores on redemptive imagery itself—the primary and first of the four thematic categories—appear to account for the lion's share of the association with self-report psychological well-being. As Table 3 indicates, enhanced agency also shows a pattern of positive associations, although it must be remembered that this subcategory is tied to the primary category in that it cannot be scored +1 unless the primary category of redemption imagery is first determined to be +1. The other two subcategories— enhanced communion and ultimate concern—are only weakly related to well-being, despite their conceptual backing in the work of Tedeschi and Calhoun (1995) and their appearance in common and classical conceptions of redemption worldwide (McAdams, 1993).

GENERAL DISCUSSION

Redemption and contamination sequences are identifiable narrative forms that appear in life-story accounts. When telling their life stories, people will sometimes juxtapose clearly negative events with positive outcomes (redemption sequences) and highly positive events with negative outcomes (contamination sequences). In two samples, evidence was obtained to suggest that redemption and contamination sequences in life stories are meaningfully associated with independent self-reports of psychosocial adaptation. In a sample of African American and Anglo-American adults between the ages of 35 and 65 years, redemption sequences were significantly more common in the interview accounts of significant autobiographical scenes provided by highly generative adults compared with their less-generative counterparts. By contrast, adults low in generativity expressed significantly higher levels of contamination imagery in their accounts compared with highly generative adults. In

addition, redemption sequences were positively associated with self-report measures of life satisfaction, self-esteem, and sense of coherence and negatively associated with depression. Contamination sequences were positively associated with depression and negatively associated with life satisfaction, self-esteem, and sense of coherence. The significant associations between well-being and redemption were replicated in Study 2 in a sample of college students whose written accounts of 10 significant life-story scenes were coded for redemption sequences and for emotional tone. The analysis suggested that redemption sequences were somewhat more strongly associated with life satisfaction and Ryff's (1989) differentiated measure of psychological well-being than was the overall emotional tone of the scenes. Encoding a marked shift from negative to positive affect, life-story scenes scoring high in redemption sequences are not simply happy stories, and many happy stories are not structured as redemption sequences.

The positive association between redemptive narratives and well-being was found for both interview-based narratives of autobiographical scenes told by midlife adults and written narratives of autobiographical scenes produced by college students. Beyond the differences between the two samples with respect to age and life experience, the two formats for data collection likely provide different kinds of data as well. In general, the written accounts (from Study 2) were shorter and more tightly crafted than the verbal accounts provided in interviews for Study 1. But the verbal accounts were richer and more variegated, likely due both to the fact that Study 1 participants, being older, had a richer autobiographical store from which to sample and to the greater ease with which one can provide more detail and digression in an interview format compared to writing. In addition, interviewers were free to ask questions such as "What do you think this event says about you?" These kinds of prompts elicited even more detail and reflection for many participants in Study 1, increasing the disparity between the two samples with respect to the overall richness and complexity of the responses.

With respect to redemption sequences, the findings in the current study are consistent with studies on benefit-finding and coping with adversity (e.g., Affleck & Tennen, 1996; Tedeschi & Calhoun, 1995). The message in these studies is that when people find some positive meaning amid adversity, they tend to show better adjustment and health down the road. Reconstructing the autobiographical past in terms of redemption sequences is a narrative strategy that is similar to benefit-finding in the face of adversity. In the case of life-narrative redemption sequences, however, the person narrating his or her life story is not necessarily facing a difficult life challenge in the present. Rather, he or she is interpreting past diffi-

culties and challenges in such a way as to conclude that good things can come from very bad events in one's life. Such a story suggests hope and progress in life and may thus confer on the storyteller a general coping advantage in life (Aldwin, Sutton, & Lachman, 1996). That such a strategy for telling one's life story should be associated with generativity in adulthood and well-being among both students and adults is a testament to the psychosocial efficacy of this kind of life construal.

Redemption sequences capture much of the central meaning in what Tomkins (1987) called the limitation-remediation script. The limitation-remediation script, with its promise of eventual redemption, is indeed an ancient story type (cf. Miller & C'deBaca, 1994) that can be identified in the myths of ancient Greece and in sacred stories in all the world's major religions (James, 1902/1958). In contemporary American society, the story takes a wide range of forms, from tales of personal recovery and conversion to accounts of healing, growth, and self-fulfillment. By contrast, the negative message of the contamination sequence suggests a fatalistic approach to life in which good events are doomed to end in failure, and actors can never summon forth the confidence that best intentions will generate fruitful outcomes. This kind of confidence undergirds what Erikson (1963) called a "belief in the species" (p. 267), a faith in the worthwhileness of the human enterprise. Adults cannot be generative without a belief in the species, Erikson maintained. They cannot effectively channel their energies into productive work aimed at securing a better future if they believe that bad outcomes will invariably occur. People who see the past as good turning into bad are less optimistic about the present and the future for their own lives and are less able to commit themselves to improving the lives of others in the present and the future.

The current study views redemption and contamination sequences as narrative strategies for the making of identity (McAdams, 1985, 1993). Identity is a life story, and as such, it exists as a product of the imagination. But life stories are not imagined out of thin air. Instead, they are based on reality as both personally known and consensually validated. There exists, therefore, a complex relationship between what really happens in a person's life and how the person chooses to remember and understand it. In depicting redemption and contamination sequences as narrative strategies, the emphasis is on how the person chooses to construct his or her reality. But it also should be emphasized that each person's reality is different in both subjective and objective senses. In this regard, one also may argue that a person chooses, for example, to narrate particular events in his or her past in a redemptive manner because that is indeed how

the events transpired: Bad things led to good things at the time.

The current study cannot rule out either of the above interpretations. Indeed, it is likely that both hold some truth. In other words, psychosocial adjustment may be associated with both the use of particular narrative strategies for making sense of the past and the fact of having experienced certain kinds of events in the past. The first explanation emphasizes the sense in which life narration is a psychologically meaningful reconstruction of the past, whereas the second underscores the fact that real events in the past may have long-term influences on such things as adult generativity and psychological well-being. McAdams (1996; McAdams et al., 1997) views life stories as psychosocial constructions that are jointly authored by the individual whose life is being told and the culture within which the individual lives, from which he or she gathers the narrative resources and frameworks that shape storytelling itself. Different cultures provide different rules for how to tell a story about a life (Rosenwald & Ochberg, 1992). Western societies hold certain expectations about the veridicality of the past—about what counts as having really happened and what else may be pure fabrication or myth. The current controversy over the veridicality of repressed memories demonstrates just how much can be at stake when such cultural assumptions are challenged.

The current study is based on the assumption that the participants told stories about the past that they believed to be more or less veridical. But it also assumes that a great deal of personal choice is usually involved in the telling of any autobiographical episode, especially when people are confronted with the task of choosing only a few events from the past that signify especially important happenings and developments in their lives. Choice is implicated not only in the selection of what particular scene to narrate but also in how to narrate the scene, how to frame its antecedents and consequences, and what conclusions to draw from it. In a redemption sequence, the individual narrates a sequence in which a very bad scene eventually results in some kind of positive outcome. In many instances, there are likely to be multiple outcomes of any particular event in a person's life. Yet the person telling the story in a redemptive manner manages to elaborate on a particularly positive outcome. By contrast, the person who tells a contamination sequence manages to find the negative consequence of a particularly positive scene. In both cases, the consequences may have really occurred, but there are likely to have been other consequences as well, some of which the individual has chosen not to narrate. Therefore, it is likely that individual differences in the ways in which people tell their life stories reflect both differences in

the objective past and differences in the styles and manners in which people choose to make narrative sense of life. The individual styles employed, furthermore, are likely to be both the causes and the consequences of different levels of psychosocial adaptation. Thus, depressed people may be especially prone to narrating life in contamination terms, and the tendency to narrate life via contamination sequences may exacerbate depression itself and undermine satisfaction with life. Future research is needed to uncover the many different narrative strategies and forms that people bring to the construction of the personal past and the consequences that these different strategies and forms have for psychological health, maturity, and happiness.

REFERENCES

Abbey, A., & Hallman, L. (1995). The role of perceived control, attributions, and meaning in members of infertile couples' well-being. *Journal of Social and Clinical Psychology, 14,* 271-296.
Affleck, G., & Tennen, H. (1996). Construing benefits from adversity: Adaptational significance and dispositional underpinnings. *Journal of Personality, 64,* 899-922.
Affleck, G., Tennen, H., & Gershman, K. (1985). Cognitive adaptations to high risk infants: The search for meaning, mastery, and protection from future harm. *American Journal of Mental Deficiency, 89,* 653-656.
Aldwin, C. M., Sutton, K. J., & Lachman, M. (1996). The development of coping resources in adulthood. *Journal of Personality, 64,* 837-871.
Antonovsky, A. (1987). *Unraveling the mystery of health: How people manage stress and stay well.* San Francisco: Jossey-Bass.
Blaine, B., & Crocker, J. (1993). Self-esteem and self-serving biases in reactions to positive and negative events: An integrative review. In R. Baumeister (Ed.), *Self-esteem: The puzzle of low self-regard* (pp. 55-86). New York: Plenum.
Bruner, J. (1990). *Acts of meaning.* Cambridge, MA: Harvard University Press.
Cohler, B. J. (1982). Personal narrative and the life course. In P. Baltes & O. G. Brim (Eds.), *Life span development and behavior* (Vol. 4, pp. 205-241). New York: Academic Press.
Cole, E., & Stewart, A. J. (1996). Meanings of political participation among Black and White women: Political identity and social responsibility. *Journal of Personality and Social Psychology, 71,* 130-140.
Denzin, N. K. (1989). *Interpretive biography.* Newbury Park, CA: Sage.
Diener, E., Emmons, R. A., Larson, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment, 49,* 71-76.
Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology, 51,* 1058-1068.
Erikson, E. H. (1963). *Childhood and society* (2nd ed.). New York: Norton.
Frenz, A. W., Carey, M. P., & Jorgensen, R. S. (1993). Psychometric evaluation of Antonovsky's Sense of Coherence Scale. *Psychological Assessment, 5,* 145-153.
Hart, H., McAdams, D. P., Hirsch, B. J., & Bauer J. (in press). Generativity and social involvements among Black and among Euro-American adults. *Journal of Research in Personality.*
Himsel, A. J., Hart, H., Diamond, A., & McAdams, D. P. (1997). Personality characteristics of highly generative adults as assessed in Q-sort ratings of life stories. *Journal of Adult Development, 4,* 149-161.
James, W. (1958). *The varieties of religious experience.* New York: New American Library, Inc. (Original work published 1902)
Janoff-Bulman, R. (1992). *Shattered assumptions: Toward a new psychology of trauma.* New York: Free Press.
Keyes, C.L.M., & Ryff, C. D. (1998). Generativity in adult lives: Social structural contours and the quality of life consequences.

In D. P. McAdams & E. de St. Aubin (Eds.), *Generativity and adult development: How and why we care for the next generation* (pp. 227-264). Washington, DC: American Psychological Association Press.

Lewinsohn, P. M., Seeley, J. R., Roberts, R. E., & Allen, N. B. (1997). Center for Epidemiologic Studies Depression Scale (CES-D) as a screening instrument for depression among community-residing older adults. *Psychology and Aging, 12*, 277-287.

McAdams, D. P. (1985). *Power, intimacy, and the life story: Personological inquiries into identity.* New York: Guilford.

McAdams, D. P. (1993). *The stories we live by: Personal myths and the making of the self.* New York: William Morrow.

McAdams, D. P. (1994). Can personality change? Levels of stability and growth across the life span. In T. Heatherton & J. Weinberger (Eds.), *Can personality change?* (pp. 299-313). Washington, DC: American Psychological Association Press.

McAdams, D. P. (1996). Personality, modernity, and the storied self: A contemporary framework for studying persons. *Psychological Inquiry, 7*, 295-321.

McAdams, D. P., & de St. Aubin, E. (1992). A theory of generativity and its assessment through self-report, behavioral acts, and narrative themes in autobiography. *Journal of Personality and Social Psychology, 62*, 1003-1015.

McAdams, D. P., de St. Aubin, E., & Logan, R. L. (1993). Generativity among young, midlife, and older adults. *Psychology and Aging, 8*, 221-230.

McAdams, D. P., Diamond, A., de St. Aubin, E., & Mansfield, E. (1997). Stories of commitment: The psychosocial construction of generative lives. *Journal of Personality and Social Psychology, 72*, 678-694.

McAdams, D. P., Hart, H., & Maruna, S. (1998). The anatomy of generativity. In D. P. McAdams & E. de St. Aubin (Eds.), *Generativity and adult development: How and why we care for the next generation* (pp. 7-43). Washington, DC: American Psychological Association Press.

McCrae, R. R., & Costa, P. T., Jr. (1990). *Personality in adulthood.* New York: Guilford.

Miller, W. R., & C'deBaca, J. (1994). Quantum change: Toward a psychology of transformation. In T. Heatherton & J. Weinberger (Eds.), *Can personality change?* (pp. 253-280). Washington, DC: American Psychological Association Press.

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.

Rosenwald, G., & Ochberg, R. L. (1992). (Eds.). *Storied lives: The cultural politics of self understanding.* New Haven, CT: Yale University Press.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*, 1069-1081.

Sarbin, T. R. (1986). The narrative as root metaphor for psychology. In T. R. Sarbin (Ed.), *Narrative psychology* (pp. 3-21). New York: Praeger.

Singer, J. A., & Salovey, P. (1993). *The remembered self: Emotion and memory in personality.* New York: Free Press.

Taylor, S. E. (1983). Adjustment to threatening events: A theory of cognitive adaptation. *American Psychologist, 38*, 624-630.

Taylor, S. E., Lichtman, R. R., & Wood, J. V. (1984). Attributions, beliefs about control, and adjustment to breast cancer. *Journal of Personality and Social Psychology, 46*, 489-502.

Tedeschi, R. G., & Calhoun, L. G. (1995). *Trauma and transformation: Growing in the aftermath of suffering.* Thousand Oaks, CA: Sage.

Tennen, H., Affleck, G., & Mendola, R. (1991). Causal explanations for infertility: Their relation to control appraisals and psychological adjustment. In A. Stanton & C. Dunkel-Schetter (Eds.), *Infertility: Perspectives from stress and coping research* (pp. 109-132). New York: Plenum.

Tomkins, S. S. (1987). Script theory. In J. Aronoff, A. I. Rabin, & R. A. Zucker (Eds.), *The emergence of personality* (pp. 147-216). New York: Springer.

Wollman, C., & Felton, B. (1983). Social supports as stress buffers for adult cancer patients. *Psychosomatic Medicine, 45*, 322-331.