Stories of Regret in Late Midlife and their Relation to Psychosocial Adaptation

Joy Hsu

Northwestern University
Abstract

Previous research indicates that regret is a painful experience for people but often leads to enhanced self meaning and personal growth. In this study, we employ a narrative approach to explore the architecture and coping methods of regret experiences in late midlife adults. We relate variation in regret narratives told by 163 adults aged 55 to 57 to psychosocial adaptation, conceptualized in terms of psychological well-being and Erikson’s adult-developmental factors of generativity and ego-integrity. Two coders analyzed interview transcripts of regret narratives for numerous content categories, including type of regret, source of regret, degree of resolution (coming to terms with, making peace with, solving the problem of) the regret, and hopefulness for the future. The qualitative results illustrate the diversity and richness of regret experiences in late midlife and flesh out the expression of 12 different coping methods for dealing with negative life experiences. The quantitative results provide empirical support for the hypothesis that degree of regret resolution is positively associated with overall psychosocial adaptation. Findings are discussed in terms of the role of the bidirectional relationship between regret resolution and psychosocial adaptation, as well as the role of regret experiences more generally in life stories and in late midlife development.
Stories of Regret in Late Midlife and their Relation to Psychosocial Adaptation

While regret has been a topic of psychological study for over two decades, researchers have rarely focused on the kinds of personal stories people tell about their experiences of regret. Narratives of regret may provide insight into the unique ways in which people make sense of difficult events in their lives, with potential implications for psychological development and adaptation. Adopting a narrative approach (Adler et al., 2017), the current study examines how a sample of late midlife adults – approximately half of whom are White and half of whom are African American – narrate experiences of regret. The study explores the experiential architecture of regret, cataloging the different issues around which regrets are described and the different ways in which late midlife adults make sense of and cope with experiences of regret. In addition, the study investigates how variation in the narration of regret relates to psychosocial adaptation, assessed as a combination of self-reported well-being (Ryff, 1989; Ryff & Keyes, 1995), generativity (Erikson, 1963; McAdams & de St. Aubin, 1992), and ego-integrity (Erikson, 1963).

Regret and Coping

Regret is the aversive emotional and cognitive sense of loss due to an unfavorable outcome. According to Landman, the six most common sources for regret concern education, career, romance, parenting, the self, and leisure (Landman, 1996). Regrets of the self involve regrets regarding negative or undesirable personality traits or habits. Regrets regarding leisure include missed opportunities for sustaining positive experiences during one’s free time, passing up opportunities for enjoying rest and relaxation, or choosing leisure time activities that end up to be unfulfilling (Roese & Summerville, 2005). Not surprisingly, people tend to regret more strongly outcomes in which they assign blame to themselves rather than outcomes in which they
place blame externally. When blame is external, people often feel as though the situation was out of their control, enabling them to avoid self-blame. When this happens, it becomes easier to resolve the cognitive dissonance that the self was responsible for the undesirable outcome (Landman, 1996).

Conversely, when people assign blame to themselves, the negative self-attribution may produce strong negative emotions, such as guilt, disappointment, or remorse (Landman, 1996). Regret can be conceptualized as the difference in payoffs between a chosen and an unchosen action (Landman, 1993). It involves not only becoming painfully aware that “what is” is unfavorable compared to “what could have been,” but also a realization that the self is to blame for the unfavorable current state of being. When the action that one deemed to be best does not result in the intended outcome, one may find fault in the self. As such, regret may have detrimental effects on mental well-being. Indeed, studies have commonly found associations between regret and symptoms of depression and anxiety (Roese et al., 2009), as well as that regret results in lower well-being and physical health, excessive rumination, and stunted psychological development (Torgest, Stewart & Miner-Rubino, 2005).

Along with distinguishing the effects of regret when blame is placed on the self and when blame is external, researchers have also distinguished effects between omission regret and commission regret. Omission regret involves feeling regret for not taking a particular action, while commission regret involves feeling regret for taking a particular action (Dibonaventura & Chapman, 2008). While commission regret may be more intense in the short term, omission regret is often described as having long term negative consequences (Gilovich & Medvec, 1995). This is in part because regrets of omission are often tied with a sense of lost opportunity that one can no longer access or benefit from (Beike, Markman, & Karadogan, 2009). At times, the
feeling of lost opportunity leads to counterfactual thinking, which is thinking about what the present may have been if something different had occurred in the past (Roese, 1997).

Whereas regrets most typically evoke negative feelings, they can also be significant in helping people find meaning in their lives, understanding themselves, and achieving higher levels of maturity and life satisfaction (King, 2001). In essence, people may learn from their mistakes and resolve to do better in the wake of regret. Indeed, some research suggests that people value regret more than other negative emotions because they feel that regret may sometimes benefit the self (Saffrey, Summerville & Roese, 2008), leading to the conceptualization of regret as a guiding factor in personal growth and self motivation.

Research investigating the transformation of negative experiences of regret in this manner has been focused on understanding how people construct, maintain, suppress, or cope with their regrets. People tend to use three different processes: the appraisal-focused, emotion-focused, and problem-focused modes of coping. Appraisal-focused coping relies on rationalizing or defending the decision or outcome of the regret, convincing the self that the outcome is actually positive and should not be considered a regret. It is described as being very cognitively intense and requires much effort (Folkman & Lazarus, 1984). By contrast, emotion-focused coping relies on avoiding or suppressing the negative emotions associated with regret, or distracting oneself with positive emotions in order not to dwell on the regret. Lastly, problem-focused coping involves attempting to manage or solve the problem caused by the regret and working towards rectifying the unfavorable decision or outcome (Folkman et al., 1986).

Coping may also be divided into goal-attendant and goal-avoidant categories. While goal-attendant coping focuses on overcoming the regret through means such as cognitive reappraisal or fixing the cause of the regret, goal-avoidant coping focuses on avoiding the regret through
means such as repressing the thoughts or emotions that arise whenever the regret becomes salient (Patrick, Lancellotti & Mello, 2003). Which approach to coping is the best depends on the situation, as problem-focused coping works best in situations in which the outcome is changeable, while emotion-focused coping works best in situations in which there is no way to rationalize or fix the situation. However, in the long-term, many psychologists do not believe emotion-focused coping to be effective, suggesting that regret can only be resolved through putting an immense amount of emotional energy into “working through” the cause of the regret. Working through the experience may involve feeling the negative emotions associated with regret to their fullest extent in order to reach a state of catharsis, relief, and self-acceptance (Landman, 1996).

**Life Stories**

Researchers who have studied regret have generally not focused on how people narrate their regrets and how they incorporate them into their life stories and self understanding. The current study, therefore, adopts a narrative approach to examine the different kinds of stories people tell about regrets in their lives and the implications of those stories for psychosocial adaptation. In recent years, narrative approaches have enjoyed considerable currency in personality, social, developmental, cognitive, and clinical psychology (McAdams, 2001; McAdams & McLean, 2013). In these studies, participants are usually asked to tell full stories about important events in their lives, the transcripts of which are later analyzed for various content themes and narrative structures (Adler et al., 2017). A strong line of research, for example, has examined how themes of agency (feeling personally empowered) and redemption (transforming negative events into positive outcomes or meanings) in personal life experiences, especially negative experiences, tend to be associated with higher levels of psychological well-
being and indices of psychosocial maturity, especially in midlife adults (e.g., Adler et al., 2016; Dunlop & Tracy, 2013; McAdams et al., 2001; McAdams & Guo, 2015).

Many researchers who employ a narrative approach draw conceptually upon the idea of narrative identity. Narrative identity is a person’s internalized and evolving story for his or her life, incorporating a broad reconstruction of the past and anticipation of the future (McAdams & McLean, 2013). As a feature of personality itself, narrative identity functions to provide people with a sense of purpose and unity in their lives, allowing them to form a temporally coherent account of how they have come to be the person they are becoming. Among the most important features of a person’s narrative identity are the stories he or she tells about the most difficult and challenging events in his or her life, including his or her regrets. Research has shown that people often draw psychologically important conclusions and insights from the autobiographical memories that comprise narrative identity. In doing so, they engage in a process of autobiographical reasoning (Habermas & Bluck, 2000), which involves drawing semantic conclusions about the self from the memory of episodic events.

As people move through midlife and later adulthood, they may reflect more heavily on their life narratives. It may become more common to contemplate past experiences, including regrets, in attempts to gain acceptance and understanding of their lives. Done successfully, this process of life review may bring a sense of satisfaction, coherency, serenity, and fulfillment, but those who are not able to reconcile difficult pasts or resolve past conflicts may instead face excessive guilt, panic, or despair (Butler, 1963, 1974).

Narratives of life regrets surely qualify as the kind of difficult life event that lends itself to personal meaning making through autobiographical reasoning. The narration of regret may prove to be especially illuminating and psychologically important for people in midlife and
beyond, because they have accumulated so many experiences over time and are likely able to identify experiences of regret that have stuck with them over the years. Indeed, such regret experiences may occupy salient positions within a midlife person’s narrative identity. The current study draws data from an ongoing longitudinal study of late midlife adults who have narrated important experiences in their lives through a life story interview (McAdams & Guo, 2015).

**Psychosocial Adaptation**

In considering psychosocial development in the second half of life, Erikson’s (1963) stage model is especially instructive. Erikson viewed middle and late adulthood, previously considered irrelevant in developing personality, as active and crucial periods of growth. In each stage of development, Erikson argued, the person faces a particular issue that is resolved in the dynamic between the needs of the self and the demands of society. Whether or not the person develops that specific virtue associated with a particular stage helps to determine the extent to which they develop positive or negative personal characteristics. Resolving a stage provides individuals with the psychosocial skills they need to navigate life, a strong sense of self, and a strong sense of mastery (Erikson, 1963, 1982).

The final two stages in Erikson’s scheme apply to midlife and late adulthood. In Generativity vs. Stagnation, adults are faced with the virtue of Care — caring for future generations by leaving their mark on society, or by creating a better world and passing down their knowledge or resources to younger generations. For many, generativity is seen as a way to leave a lasting mark on society. Assuming many different forms, generativity may be expressed in raising children, pursuing a meaningful career, creativity, leadership, and volunteering in the community, among other expressions (McAdams & de St. Aubin, 1992). Successfully resolving
this stage leads to a sense of accomplishment and fulfillment. Failure to resolve this stage results in a sense of disconnect from society and the feeling that the self does not matter and will not be remembered (McAdams, 2019).

A number of studies have examined the relationship between generativity on the one hand and features of narrative identity on the other. Adults who score higher on self-report measures of generativity tend to tell life narratives filled with redemption sequences, in which they overcame adversity and thereby received second chances in life (McAdams, 2013). These highly redemptive stories also tend to prominently feature themes of having enjoying a childhood advantage, early awareness of the suffering of others, moral clarity and steadfastness, and future growth and fulfillment (McAdams, 2013; McAdams & Guo, 2015). Redemptive life stories like these may support and justify a highly generative approach to life. Generative midlife adults understand what it is like to experience suffering and loss, but view themselves as blessed with certain privileges and second chances, and therefore may feel that they are able to imbue their positive mindset or resources onto others and thereby promote the well-being of future generations.

The last stage of Erikson’s model is known as Ego-Integrity vs. Despair. Older adults may contemplate the course of their lives and decide whether they have accomplished what they hoped to do and if they are satisfied with the lives they led. Successfully resolving this stage leads to the virtue of Wisdom, Erikson (1982) argued, and a sense of acceptance and peace. It would be expected, therefore, that older people experiencing high levels of ego integrity might have better resolved their regrets and, therefore, be at peace with their lives. By contrast, those low in ego-integrity may have more unresolved regrets. Feeling frustrated and unfulfilled, they may sink into despair (Erikson, 1963; Torges, Stewart, & Duncan, 2009). Failure to resolve this
stage also leads adults to feel a sense of anxiety of ending their lives without completing what they sought out to accomplish, potentially resulting in depressive symptoms and fluctuating mental health (Westerhof, Bohlmeijer & McAdams, 2017).

If the stage-related constructs of generativity and ego integrity mark developmental indices of psychosocial adaptation in midlife and beyond, a third more generic index of psychosocial adaptation may be overall psychological well-being (Keyes, 1998). Applicable to nearly any point in the human life cycle from late childhood onwards, psychological well-being refers broadly to the extent to which a person feels happy and satisfied with his or her life. It indeed makes intuitive sense that people who experience higher levels of overall well-being are more adapted to their current life stage, regardless of what that developmental stage is. In the present study, therefore, psychosocial adaptation is operationalized through self-report measures of generativity, ego-integrity, and psychological well-being.

Similarly, it makes intuitive sense for those who are more psychosocially adapted to display more positive attributes in regards to their cognitive and emotional processes. Even when reflecting on their regret experiences, which are inherently negative, these people may express these characteristics, especially if they were to touch on redemption sequences or find meaning within their regret narratives. They may attribute blame externally rather than to themselves, as self blame often results in lower self esteem, increased loneliness increased depressive symptoms, and maladjustment to life stages (Graham & Juvonen, 1998, Cascardi & O’Leary, 1992). Additionally, those who are more psychosocially adapted have a more hopeful outlook on life despite negative life occurrences, especially in the context of severe or terminal illnesses (Rideout & Montemuro, 1986).
The current study is the first of its kind to investigate the nature of regret stories and their relation to psychosocial adaptation, which encompasses well-being and the Eriksonian developmental factors of generativity and ego-integrity. Expanding on previous frameworks of regret and Erikson’s developmental stages, it strives to better understand how experiencing regret in mid to late adulthood affects and is affected by psychosocial adaptation. By adopting a narrative perspective, the study examines the different features and themes that arise when midlife adults describe experiences of regret from their past. These stories of regret reveal, for example, the objects and sources of regret, whether the regret involves omission or commission, methods of coping with regret, the degree to which a person has worked through or resolved a regret, and their hopefulness for the future.

An important goal of the study is to provide descriptive information regarding stories of regret, and to report similarities in differences in regret stories as reported by men versus women, and African American participants versus White participants. We do not aim to test hypotheses regarding mean group differences based on gender or race. However, we do aim to test hypotheses regarding how thematic variation in regret narratives is related to self-reported psychosocial adaptation in late midlife adults. Since unresolved regrets and failures may prevent one from accepting the course of one’s life and achieving high levels of well-being, we hypothesize that the extent to which adults resolve or reconcile their regret challenges will be positively associated with overall psychosocial adaptation, as operationalized through generativity, ego-integrity, and psychological well-being. We expect the hypothesized relationship to be especially strong for the index of ego integrity, which captures the broad idea of life acceptance. Similarly, we hypothesize that late midlife adults scoring high on
psychosocial adaptation, will (1) attribute blame for regret experiences to more external rather than internal sources, and (2) maintain more hope for the future in the wake of their regrets.

Method

Sample

The data used for this study comes from the Foley Longitudinal Study of Adulthood (FLSA), which includes transcribed life-story interviews from 163 adults (64.42% female, 35.58% male) aged 55 to 57 in 2009 to 2010. Participants were recruited by a social-science research firm in the greater Chicago-Illinois area targeting White and African American adults. For the collected sample, 55.21% of participants were White, 42.94% were African American, 0.61% were interracial, and 0.61% described themselves as “other”. Annual household incomes ranged from under $25,000 to more than $300,000, with a median income of $75,000 to $100,000. White participants had significantly higher incomes than African American participants, t(158) = 6.02, p < .0001. The majority of the sample was college educated: 5% received a high school diploma only, 27% attended some college, 24% graduated college, and 44% had some graduate education. White participants had slightly higher education than African American participants, but this difference was not statistically significant.

Additionally, participants filled out online self-report measures before each interview to collect information on demographics and measures of generativity, ego-integrity, and psychological well-being, among a host of other psychological and social constructs.

Measurement

While measures of psychosocial adaptation (generativity, ego-integrity, and psychological well-being) were measured using well validated scales that relied on self-report, features of regret were assessed through content analysis of regret stories.
Generativity. Each participant completed the Loyola Generativity Scale (LGS; McAdams & de St. Aubin, 1992) before each interview to measure generativity. The scale measures concern about and activity involving promotion of the well-being of future generations. Participants rate 20 items on a 4-point scale ranging from 0 (never applies to me) to 3 (always applies to me). Representative items include “I try to pass along knowledge I have gained through my experiences,” and “I feel as though my contributions will exist after I die.”

Ego-integrity. Each participant completed the Northwestern Ego Integrity Scale (NEIS; Janis et al., 2011) before each interview to measure ego-integrity. The scale measures both ego-integrity and despair as well as coherence, acceptance, and wholeness, and asks participants to rate 15 different items on a 6-point scale ranging from 1 (strongly disagree) to 6 (strongly agree). Representative items include “It pains me to think about dreams and goals I have had that I did not fulfill” and “I have reached a point where I can accept the events in my life as having been necessary.”

Psychological Well-Being. Each participant completed the a 42-item scale of Psychological Well-Being (PWB) designed by Ryff and Keyes (1995). The scale measures six different aspects of well-being including autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Participants rate 42 items on a 6-point scale ranging from 1 (strongly disagree) to 6 (strongly agree). Representative items include “In general, I feel I am in charge of the situation in which I live,” and “Maintaining close relationships has been difficult and frustrating for me.”

Regret Narratives. In The Life Story Interview, participants were asked to describe their respective lives as if they were novels, being sure to name chapters, key scenes, characters, and
themes. To sample the narration of regret, we considered the following question that was asked as a part of the larger interview:

“Everybody experiences failure and regrets in life, even for the happiest and luckiest lives. Looking back over your entire life, please identify and describe the greatest failure or regret you have experienced. The failure or regret can occur in any area of your life – work, family, friendships, or any other area. Please describe the failure or regret and the way in which the failure or regret came to be. How have you coped with this failure or regret? What effect has this failure or regret had on you and your life story?”

Procedure

A graduate student or postdoctoral fellow administered interviews lasting approximately two hours to each participant at three different points over a ten year period using a standardized life-story protocol developed by McAdams (2013). Interview questions asked about the life stories of participants, including questions on best and worst memories, turning points, and regrets, but only the interview question on regret was used for data analysis.

To develop the coding scheme, we read the first 40 interviews to see which themes were most common. After creating a list of the most common themes, descriptive variables we wanted to examine, and the variables that would test the hypotheses, we narrowed down the amount of items we would code to the six listed below. Two independent coders analyzed each regret narrative and coded them by assigning quantitative values for whether the regret was of omission or commission, whether the regret had an external or internal attribution, the degree of resolution,
and the subject’s hopefulness for the future. A single coder assigned descriptive information about what the regret was about and what the methods of coping were.

1. **Object of regret**: The topic or object of the participant’s regret. Coding for this collects basic descriptive information about the kinds of regrets that participants expressed during their interviews, and allows for analysis on its relationship with psychosocial adaptation. After reading through the first 40 interviews, the following were the topics we found that participants claimed they most regretted. Coders classified each participant’s response to fitting in at least one of the following categories, which were not mutually exclusive: romantic love or marriage, children, other family issues (e.g., parents, siblings, in-laws), friendships, career, financial issues, education, physical appearance, personality/character (personal traits), and other (list).

2. **Omission versus commission**: Whether participants have regrets of omission, meaning they regret *not* taking certain actions, or regrets of commission, meaning they regret taking certain actions. Like coding for object of regret, coding for omission and commission collects descriptive information to provide a more thorough understanding of what the participants most regretted. Coders rated participant responses on a 3-point scale, with a score of 1 indicating a regret of omission, a score of 2 indicating a mix of commission and omission, or if it was indeterminate or could not be coded, and a score of 3 indicating a regret of commission (inter-rater reliability: \( r = 0.66 \)).

3. **Method of coping**: The ways in which participants chose to cope with, deal with, resolve, or handle their regrets. Coding for method of coping collects descriptive information about the kinds, frequency, and effectiveness of the coping methods participants used. The following were the methods that participants used most often to
cope with their regret. Like with object of regret, coders classified each participant’s response to fitting in at least one of the following categories, which were not mutually exclusive: denial, ignoring the problem/issue, rationalization (explaining or finding an excuse), cognitive reframing (finding a good way to think about it), benefit finding (construing a positive meaning), developing goals, taking direct action to solve problem, religion, social support (from family or friends), atonement, forgiveness, and rumination.

4. **Degree of resolution**: The degree to which participants are perceived to have resolved their regrets. Coding for degree of resolution allows for analysis of the first hypothesis, in which it is hypothesized that degree of resolution is positively associated with higher psychosocial adaptation. Coders rated participants on a 5-point scale, with a score of 1 indicating that the subject expressly suggests that the regret is still actively disturbing his or her life, keeping him or her from enjoying life, moving forward in life, attaining maturity or fulfillment, and/or achieving valued goals in life. A score of 5 indicates that they showed the highest degree of resolution and have worked through or overcome the pain associated with the regret, solved the problem at hand, and/or come to accept the regret as part of their life stories (inter-rater reliability: $r = 0.59$).

5. **Internal versus external source of regret**: Whether the source of regret is internal and it is perceived that the participants blame themselves for their regret, or if the source is external and it is perceived that the participants blame someone or something else for their regret. Coding for the source of regret allows for analysis of the first part of the second hypothesis, in which it is hypothesized that those ranking higher on psychosocial adaptation will attribute more external blame to their regret rather than internal blame. Coders rated participant responses on a 3-point scale, with a score of 1 indicating the
regret is internal and caused by the self, a score of 2 indicating the source of the regret is mixed or indeterminate, and a score of 3 indicating the regret was caused by someone else, something else, or the environment (inter-rater reliability: \( r = 0.51 \)).

6. **Hopefulness for the future**: The degree of overall optimism or pessimism that the subject expresses throughout the narrative. Coding for hopefulness for the future allows for analysis of the second part of the second hypothesis, in which it is hypothesized that those ranking higher on psychosocial adaptation will express more hopefulness for the future. Coders rated participant responses on a 5-point scale, with a score of 1 indicating despair or no hope for the future, and a score of 5 indicating high hopefulness and optimism (inter-rater reliability: \( r = 0.55 \)).

**Results**

Taking scores for generativity (\( M = 43.16, SD = 8.88 \)), ego-integrity (\( M = 4.32, SD = .66 \)), and psychological well-being (\( M = 202.65, SD = 26.45 \)), we converted them to Z scores and added them together in order to assign scores for each of the participants for the variable of psychosocial adaptation (\( M = -0.022, SD = 2.48 \)). We found that scores for omission versus commission and internal versus external source of regret tended to be below the arithmetic midpoint, suggesting a slight tendency towards more regrets of omission rather than regrets of commission (\( M = 1.68, SD = .74 \)) and towards more regrets attributed to internal sources rather than external ones (\( M = 1.64, SD = .75 \)). Similarly, scores of resolution (\( M = 2.87, SD = .98 \)) were a bit below the midpoint, while scores of hopefulness (\( M = 3.46, SD = 1.11 \)) were a bit above the midpoint. Table 1 displays the means, standard deviations, minimums, and maximums of scores of psychosocial adaptation, generativity, ego-integrity, psychological well-being, degree of omission versus commission, degree of internal versus external source blame, degree
of resolution, and hopefulness for the future, with respect to the overall sample, inclusive of White adults, African American adults, men, and women.

African American adults ($M = 1.06, SD = 2.13$) scored significantly higher than White adults ($M = -.78, SD = 2.46$) on psychosocial adaptation, $t(128) = 4.38, p < .001$. Indeed, African American adults scored significantly higher than White adults on generativity ($M = 45.54, SD = 8.52; M = 41.16, SD = 8.76), $t(157) = 3.17, p < .01$, ego-integrity ($M = 4.54, SD = .60; M = 4.17, SD = .68), t(128) = 3.19, p < .01$, and psychological well-being ($M = 211.7, SD = 24.18; M = 195.5, SD = 26.37), t(158) = 4.01, p < .01$. However, when examining the architecture of the regrets themselves, there were no significant group differences for regrets of omission and commission, source of regret, degree of resolution, or hopefulness for the future. Table 2 displays race differences.

There were only group differences in gender in relation to psychological well-being, with women ($M = 206.3, SD = 26.06$) scoring significantly higher than men ($M = 196.1, SD = 26.11), $t(161) = 2.39, p < .05$. Similar to our findings with race, there were no significant group differences for regrets of omission and commission, source of regret, or degree of resolution. However, there was a trend towards women showing higher hopefulness for the future ($M = 3.56, SD = 1.11; M = 3.28, SD = 1.10), $t(147) = 1.92, p = .056$. Table 3 displays gender differences.

When examining participants’ objects of regret, we found that 24% had regrets of career choices, 23% had regrets of education, 21% expressed regrets in their marriage or romantic relationships, 17% regretted parenting or relationships with their children, 9% had regrets relating to other family members, 9% had regrets concerning friendships, 7% regretted financial
issues, 6% regretted some personal character trait, and 3% had other regrets not included in our coding scheme. Table 4 displays the instances and frequencies of the different objects of regret.

Similarly, when studying methods of coping, we found that 32% ruminated and excessively worried about their regret, 26% took direct action, 24% rationalized or explained away the regret, 20% utilized cognitive reframing to think about their regrets in a positive way, 18% found some benefit in their regret, 12% ignored the regret, 11% forgave themselves or others, 9% reached out for social support, 7% turned to religion, 5% atoned for their regret, 3% developed goals to assist with coping, and 3% utilized denial. Table 5 displays the instances and frequencies of the different methods of coping.

Overall, we found strong support that psychosocial adaptation is related to degree of resolution. As predicted in our first hypothesis, we found a significant positive correlation between degree of resolution and psychosocial adaptation ($r = .25, p < .01$). In fact, there was a small but positive correlation between resolution of regret and all the variables that operationalized psychosocial adaptation, including generativity ($r = .19, p < .05$), ego-integrity ($r = .19, p < .05$), and psychological well-being ($r = .25, p < .01$). After running a partial correlation controlling for income, which was significantly positively correlated with degree of resolution ($r = .27, p < .001$), we found that degree of resolution was still significantly positively correlated with psychosocial adaptation ($r = .26, p < .01$). Essentially, findings indicate that late to midlife adults who scored high on self-report measures of psychosocial adaptation, generativity, ego-integrity, and psychological well-being tended to tell stories of regret in which their regrets were more resolved than adults who scored lower on these measures.

Our second hypothesis was only partially supported in that while there was a significant positive correlation between psychosocial adaptation and hopefulness for the future ($r = .24, p <
.01), there was no significant correlation between psychosocial adaptation and attribution of external regrets. These findings indicate that late to midlife adults who scored higher on self-report measures of psychosocial adaptation tended to tell their stories of regret with more hope for the future, or belief that the future would be more favorable than the past and present.

Discussion

The current study is the first of its kind to explore regret from a narrative approach as it relates to psychosocial adaptation. We aim to investigate how the regret stories of late to midlife adults reflect on their psychosocial adaptation and also to better understand the architecture of the regret stories themselves. To achieve both of these objectives, we coded for variables such as what the object of the regret was, whether the regret was of omission or commission, whether there was internal or external blame attribution, the degree of the regret resolution, the different methods of coping used, and the degree of hopefulness for the future. In order to operationalize psychosocial adaptation, we used scores of psychological well-being as well as generativity and ego-integrity, which are based off of the Eriksonian developmental stages.

Turning to understand how regret is related to psychosocial adaptation, we hypothesized that the degree of resolution of regret is positively associated with psychosocial adaptation. This hypothesis was supported, as not only was degree of resolution positively associated with psychosocial adaptation, but it was also positively associated with generativity, ego-integrity, and psychological well-being. However, these associations were all small, and the largest relationship was not with ego-integrity, as predicted. We had hypothesized that ego-integrity would have the strongest correlation with degree of resolution, since at its essence ego-integrity is about acceptance of one’s life and life choices, which aligns with resolving regrets. This
hypothesis was not supported, as psychological well-being had a stronger association with degree of resolution than ego-integrity, although this difference was not significant.

For our second hypothesis, we predicted that psychosocial adaptation would be positively associated with both attribution of external blame and hopefulness for the future. However, we found that psychosocial adaptation was only positively associated with hopefulness. These results show that blaming the self as the source of the regret does not significantly have a relationship with psychosocial adaptation. Rather, the amount of hope for the future plays a role in determining this. This was as expected, as previous findings have shown that having hope is linked to psychosocial adaptation, especially in patients under medical care (Livneh & Martz, 2014; Rideout & Montemuro, 1986). As applied to late to midlife adults, hope may be key in securing high psychosocial adaptation because it may allow people to accept the possibility of a better future in which the regret is less salient or relevant, giving them something to work towards and expect.

Reading over the narratives of regret, there were some that were clearly regrets of omission with low degrees of resolution and low hopefulness for the future, such as this one which received scores of 1 for all of the above variables, and a score of 2 for internal versus external source of regret. It was coded as being a regret of marriage, with rumination as the method of coping:

“Well, probably, probably the biggest one really is, is my marriage at this point. I mean it's, it's a failure in all the, the senses of what a marriage should be except, you know, we're, we're hanging in there for, you know, the kids which is probably not uncommon... So anyway, but I, you know, I, I have not done, you know, everything I could have certainly
to, you know, to nurture that relationship. My wife is a very outgoing, you
know, friendly person. She really values her friendships. And, you know,
sh -- she still has her friends but, you know, in relationship with me, she's,
you know, she's just a totally different, very nasty person. But I know that
I contributed to that and, you know, and that's a big regret because, you
know, my ac -- most of my, my actions or inactions really have changed
her, you know, in certain ways. So I, you know, I, I think that's a big
failure. And, you know, as I was going along I didn't intentionally do
anything. This wasn't like I was conniving or, you know, but it was more
of a not -- it was more, you know, errors of omission... -- I think she kind of
dropped out of the marriage about ten years ago, but she didn't tell me for
a while... So the, you know, the hostility kind of built up, and it's, it's
amazing, without getting off track, but I noticed ma -- many years ago she
started cutting me off in conversation. I mean I tried to explain
something, go to something else. And that just -- and that was the first
indication. It just kind of escalated. So now, basically, we don't talk at all
except when we have to... But, you know, there were things I, I certainly
could have done that probably would have made it better and, you know,
have given us, given us more of a chance. So, so that, I mean and the -- I
guess the inaction in the marriage is probably, you know, the biggest
failure I would say.”

Conversely, there were also narratives of regret that exhibited high degrees of
resolution as well as much hopefulness for the future. The following narrative received
scores of 1 for omission versus commission and for internal versus external source of regret, and received scores of 5 for degree of resolution and hopefulness for the future. It was coded as a regret of education, with methods of coping that included social support, religion, cognitive reframing, and benefit finding:

“I've always -- when I graduated from high school I, I always wanted to go away to college. But I also had a sense of responsibility for my mom. And I wanted to help her. I cope with it in, in the sense that, uh, it’s no one's fault but my own that I didn't finish school. But I also -- the way I cope with it -- see I've learned, as I told you earlier, so much in life from other -- not, not on the job only. Through my pastor, uh, my mother, the determination that she had even as a woman who never really an education but on a maid's salary bought a home and kept children from being -- we never lived in the streets. We never lived in a housing project. Uh, we've never been set out and we never had our gas turned off we never had our lights shut off or any of that stuff, you know. And she was a single woman with a -- what, 5th grade education. So I, I cope with it by saying that there are worst things in the world than not getting a college degree. Uh, I make more money than most college graduates do today. And, and I just count that as a blessing from God. You know I've learned things that, and, and encountered things in my life that a lot of people won't even -- don't even have an idea what goes on in the judicial system, you know. And, and from that, um, you learn other things. So I cope with it by saying, well, look here, there's worse things in the world than
finishing -- not finishing school. You've been blessed to have a good, uh, uh, job and benefits and everything else. So I said well, you can go back to school and get your education if that's what you want to do. So that's how I cope with it, just being blessed, feeling that I'm still blessed even though despite the fact that I did not finish college, that I've been well provided for.”

As exemplified in these regret narratives, the results from this study indicate that the most common regrets in late to midlife adults are those relating to career decisions and education, followed by regrets concerning relationships with significant others and family members. This may be the case due to the demographics of the participants in the study, as they are all from the generation of Baby Boomers. Indeed, according to the Pew Research Center, only 24% of Baby Boomers received a Bachelor’s degree or higher, compared to 39% of Millennials.

Additionally, we found that the most common method of coping, or rather handling the regret, was rumination. In essence, our findings showed that a large number of participants relied on rumination, therefore failing to cope with the regret, rather than utilize healthy methods of coping. Of those who were able to cope with their regrets, the second and third most common methods were using direct action and rationalization, respectively. Direct action is a kind of action-focused coping, and involves actively doing something to reverse the regret, such as going back to school to complete a bachelor’s degree that one regretted not finishing. Rationalization, on the other hand, is more cognitive and involves explaining away the regret and justifying it to the self in order to alleviate the negative affect caused by regret. Since the most common regrets of this sample were related to career and education, problem-focused coping may have been the
most appropriate since many of these regrets were able to be reversed or reconciled by taking action to undo the cause of the regret, such as by finishing a college education.

Discrepancies in the number or participants who produced self reported measures of generativity, ego-integrity, and psychological well-being were a limitation to the study. Due to the nature of the FLSA study and dataset, measures for ego-integrity were not set in place until at a later time in the longitudinal study. As a result, while 163 participants produced scores for generativity and psychosocial well-being, only 133 participants produced scores for ego-integrity. Therefore, there were only 132 standardized scores for psychosocial adaptation, as it was necessary for each participant to have all three scores in order to produce scores for psychosocial adaptation. Additionally, only 149 participants were able to articulate regret narratives, as the others claimed they had no regrets in their lives.

Findings from this study will provide insight into adult personality development and provide an overarching framework on how regret influences social and personality development. As midlife adults transition into late adulthood, some may have difficulty adjusting and display lower generativity, lower ego-integrity, or lower psychological wellbeing. Especially as adults belonging to Generation X reach late adulthood, more and more will find themselves facing their regret narratives. Although still far off in the future, Millennials, who are currently the largest generation according to Pew Research Center, will likely also grapple with similar struggles as they reach mid to late adulthood. As a result, forming a strong understanding of how regret stories influence this life stage transition can be key in helping struggling adults overcome these developmental obstacles. Future studies should explore direction of causality between these associations, as it is currently uncertain whether low psychosocial adaptation leads to regret stories with lower regret resolution, or vice versa. Though there is much work to do, the findings
from the current study and other similar studies on generativity, ego-integrity, psychological well-being such as the one proposed may inform research in clinical settings in developing interventions for late to midlife adults struggling with psychosocial adaptation.
References

Adler, J. M., Dunlop, W. L., Fivush, R., Lilgendahl, J., Lodi-Smith, J., McAdams, D. P.,

narrative identity in predicting well-being: A review of the field and recommendations

Beike, D. R., Markman, K. D., & Karadogan, F. (2009). What we regret most are lost
opportunities: A theory of regret intensity. Personality and Social Psychology

Retrieved May 16, 2020, from https://www.pewsocialtrends.org/essay/millennial-life-
how-young-adulthood-today-compares-with-prior-generations/

26(1), 65-76.

geriatrics Society, 22(12), 529-535.


Cox, K. S., Wilt, J., Olson, B., & McAdams, D. P. (2010). Generativity, the Big Five, and


and validation of the Northwestern Ego Integrity Scale. *Evanston, IL.: Northwestern University.*


Table 1
### Descriptive Statistics of Total Sample

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generativity</td>
<td>43.16</td>
<td>8.88</td>
<td>17.00</td>
<td>58.00</td>
</tr>
<tr>
<td>Ego-Integrity</td>
<td>4.32</td>
<td>0.66</td>
<td>2.33</td>
<td>5.93</td>
</tr>
<tr>
<td>Psychological Well-Being</td>
<td>202.65</td>
<td>26.45</td>
<td>113.00</td>
<td>245.00</td>
</tr>
<tr>
<td>Omission vs. Commission</td>
<td>1.68</td>
<td>0.74</td>
<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Internal vs. External</td>
<td>1.64</td>
<td>0.75</td>
<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Degree of Resolution</td>
<td>2.87</td>
<td>0.98</td>
<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Hopefulness</td>
<td>3.46</td>
<td>1.11</td>
<td>1.00</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Table 2
### Descriptive Statistics Comparing White Adults and African American Adults

<table>
<thead>
<tr>
<th></th>
<th>White Adults</th>
<th></th>
<th>African American Adults</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Generativity</td>
<td>41.16</td>
<td>8.76</td>
<td>45.54</td>
<td>8.52</td>
</tr>
<tr>
<td>Ego-Integrity</td>
<td>4.17</td>
<td>0.68</td>
<td>4.54</td>
<td>0.60</td>
</tr>
<tr>
<td>Psychological Well-Being</td>
<td>195.50</td>
<td>26.37</td>
<td>211.70</td>
<td>24.18</td>
</tr>
<tr>
<td>Omission vs. Commission</td>
<td>1.69</td>
<td>0.73</td>
<td>1.65</td>
<td>0.73</td>
</tr>
<tr>
<td>Internal vs. External</td>
<td>1.62</td>
<td>0.71</td>
<td>1.65</td>
<td>0.79</td>
</tr>
<tr>
<td>Degree of Resolution</td>
<td>2.92</td>
<td>1.04</td>
<td>2.81</td>
<td>0.90</td>
</tr>
<tr>
<td>Hopefulness</td>
<td>3.40</td>
<td>1.11</td>
<td>3.52</td>
<td>1.13</td>
</tr>
</tbody>
</table>

Table 3
Descriptive Statistics Comparing Men and Women

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Standard Deviation</th>
<th>Women</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generativity</td>
<td>42.40</td>
<td>8.82</td>
<td>43.58</td>
<td>8.93</td>
</tr>
<tr>
<td>Ego-Integrity</td>
<td>4.19</td>
<td>0.71</td>
<td>4.39</td>
<td>0.62</td>
</tr>
<tr>
<td>Psychological Well-Being</td>
<td>196.10</td>
<td>26.11</td>
<td>206.30</td>
<td>26.07</td>
</tr>
<tr>
<td>Omission vs. Commission</td>
<td>1.75</td>
<td>0.73</td>
<td>1.65</td>
<td>0.74</td>
</tr>
<tr>
<td>Internal vs. External</td>
<td>1.55</td>
<td>0.70</td>
<td>1.69</td>
<td>0.77</td>
</tr>
<tr>
<td>Degree of Resolution</td>
<td>2.66</td>
<td>0.94</td>
<td>2.98</td>
<td>0.98</td>
</tr>
<tr>
<td>Hopefulness</td>
<td>3.28</td>
<td>1.10</td>
<td>3.56</td>
<td>1.11</td>
</tr>
</tbody>
</table>

Table 4
### Frequencies and Instances of Objects of Regret

<table>
<thead>
<tr>
<th>Object of Regret</th>
<th>Instances</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career</td>
<td>36</td>
<td>24%</td>
</tr>
<tr>
<td>Education</td>
<td>34</td>
<td>23%</td>
</tr>
<tr>
<td>Marriage/Romantic Relationships</td>
<td>31</td>
<td>21%</td>
</tr>
<tr>
<td>Children/Parenting</td>
<td>26</td>
<td>17%</td>
</tr>
<tr>
<td>Family</td>
<td>14</td>
<td>9%</td>
</tr>
<tr>
<td>Friendship</td>
<td>13</td>
<td>9%</td>
</tr>
<tr>
<td>Financial Issues</td>
<td>10</td>
<td>7%</td>
</tr>
<tr>
<td>Personal Character Trait</td>
<td>9</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>3%</td>
</tr>
</tbody>
</table>

Table 5
### Frequencies and Instances of Methods of Coping

<table>
<thead>
<tr>
<th>Method of Coping</th>
<th>Instances</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rumination</td>
<td>47</td>
<td>32%</td>
</tr>
<tr>
<td>Direct Action</td>
<td>39</td>
<td>26%</td>
</tr>
<tr>
<td>Rationalization</td>
<td>36</td>
<td>24%</td>
</tr>
<tr>
<td>Cognitive Reframing</td>
<td>30</td>
<td>20%</td>
</tr>
<tr>
<td>Benefit Finding</td>
<td>27</td>
<td>18%</td>
</tr>
<tr>
<td>Ignoring the Regret</td>
<td>18</td>
<td>12%</td>
</tr>
<tr>
<td>Forgiveness</td>
<td>16</td>
<td>11%</td>
</tr>
<tr>
<td>Social Support</td>
<td>13</td>
<td>9%</td>
</tr>
<tr>
<td>Religion</td>
<td>10</td>
<td>7%</td>
</tr>
<tr>
<td>Atonement</td>
<td>8</td>
<td>5%</td>
</tr>
<tr>
<td>Making Goals</td>
<td>5</td>
<td>3%</td>
</tr>
<tr>
<td>Denial</td>
<td>4</td>
<td>3%</td>
</tr>
</tbody>
</table>