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Comparing Resiliency in Early and Late-Life Bereavement

By

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for Graduation *summa cum laude*
and
for Graduation with Honors from the Department of Psychological and Brain Sciences

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Abstract

Bereavement is the state of dealing with a significant loss (M.S. Stroebe, Hansson, Schut, & Stroebe, 2008). Although evidence suggests that there are differences in the bereavement and coping styles of older and younger adults, few studies have been done focusing solely on the differences. The lack of research on this topic merits further study. The purpose of this project was to examine the differences in negative emotions, affective complexity, and repressive coping, between bereaved younger and older adults. We hypothesized that bereaved older adults would report fewer negative emotions, have greater emotional complexity, and use repressive coping more than their younger counterparts. Participants were 51 older adults and 110 younger adults recruited throughout the Louisville community, all of who were bereaved less than a year. We compared reactions to grief in both groups by administering the Positive and Negative Affect Schedule (PANAS), State Trait Anxiety Inventory (STAI), and Marlow-Crowne Social Desirability Scale (MC), among other measures. We found only partial support for differences in affective complexity, and the results supported the hypothesis that older adults would be more likely to use repressive coping. In other respects, older and younger adults appeared to respond very similarly to bereavement, which may be quite consistent across the lifespan. Future research might examine how affective complexity may be advantageous to the bereavement process, particularly for older adults.

Introduction

Bereavement is the state of dealing with a significant loss (Stroebe, Hansson, Schut, & Stroebe, 2008). Grieving is a highly personalized experience that differs from person to person. Although evidence suggests that there are significant differences in the bereavement of older and younger adults, few studies have been done focusing solely on these differences. The lack of research on this topic merits further study. The purpose of this study is to examine the differences in negative emotions, affective complexity, and repressive coping, between bereaved younger and older adults.

Previous research completed in the field of resiliency in early and late-life bereavement has shown that older adults report fewer negative emotions (Mroczek & Kolarz, 1998), and in day-to-day living experience fewer negative emotions (Carstensen, Pasupathi, Mayr, Nesselroade, 2000) compared to younger adults involved in the studies. Such differences are consistent with the Socioemotional Selectivity Theory, which connects the alteration of goals with “time perspective” (Lockenhoff and Carstensen, 2004, p. 1395). The theory provides two main motivational paths, one centered on emotion and the other on knowledge, which people follow at different times throughout their lives. The knowledge trajectory is often associated with younger adults because they look toward the future with a thirst for knowledge to help them achieve career and educational goals. In contrast, the Socioemotional Selectivity Theory states “increasing age is associated with greater appreciation of life and greater investment in emotionally meaningful social relationships” (Carstensen, Mayr, Pasupathi & Nesselroade, 2000, p. 645). Thus, older adults focus more on the emotional trajectory as they become aware of their own mortality. Less time is seen as a means to invoke more meaningful goals. This awareness combined with a focus on meaningful relationships leads to the idea that older adults will have

improved emotional experiences compared to their younger counterparts. This can be seen in Mroczek and Kolarz's survey (1998), in which the researchers found a "decrease in negative affect across [their] 25-to 74-year-old age range" (p. 1341).

Since older adults perceive their time as limited, emotional experiences tend to become more mixed. The theory of "mixed emotions," known as affective complexity, has been previously studied. Research has shown that older adults show a greater complexity of emotions than younger adults (Carstensen, Mayr, Pasupathi, Nesselrode, 2000). Socioemotional Selectivity Theory states that: "Emotional experience is subsequently expected to be more complex and the experience of mixed emotions more frequent" (Carstensen et al., 2000, p. 645). As adults develop intellectually, they must integrate knowledge gained from personal experiences into the knowledge structures that are already present. It is possible that emotional responses follow suit and provide more complex results, as well as flexible methods of adapting (Diehl et al., 1996). An association between emotional maturation and adulthood is theorized to some degree by the life span developmental theories of Labouvie-Vief and her colleagues, and the SST (Carstensen et al., 2000). As one ages and undergoes various life experiences, new knowledge of emotions from said experiences helps to bring about greater regulation of emotion. Thus, older age brings forth a sense of emotional maturation.

Other studies suggest that older adults use repressive coping more than their younger counterparts (Erskine, Kvavilashvili, Conway & Myers, 2007). Repressive copers can be described as people who keep their true reactions to situations and stimuli from coming to a conscious awareness by using an array of methods (Weinberger, 1990). When asked about their past, repressors tend to omit negative memories. Also, in learning paradigms, they struggle to remember the negatives. Those classified as repressors "use an avoidant style of information

processing” (Myers, 2010, p 5) and in stressful conditions, do not report high levels of distress or anxiety. In the study by Erskine and colleagues (2007), results consistent with their hypothesis showed that a larger number of older adults were classified as repressors than their younger counterparts, “41% vs. 11%, respectively”.

Most people associate the term “repressive coping” with maladaptive behaviors, but this is not accurate. It is important to distinguish between repression/suppression and repressive coping. Unlike thought suppression and repression, repressive coping is an automatic and unconscious response. Thought suppression and repression are considered deliberate types of avoidance, where the individual consciously tries to suppress something. Suppression and repression are therefore different from repressive coping. (Coifman, Bonanno, Ray & Gross, 2007).

Coifman et al. (2007) discusses how repressive coping is an effective way for bereaved individuals to cope with aversive events. As such, repressive coping may pave the way for resilience in bereavement. Coifman et al. replicated previous studies and once more found that repressive coping evidences many benefits and holds no health costs. In this study, repressors had fewer symptoms of depression, anxiety, and PTSD. Bereaved repressors were more likely to adjust better over the long term than their counterparts who did not use a repressive coping style. Classified repressors tend to focus more on presenting themselves as socially desirable despite feeling anxious. This can help bereaved individuals to continue functioning at work, school, in their social lives, etc., while still coping with their loss.

Myers (2010) discusses how repressors have the ability to separate bodily reactions from stress, thus limiting their distress/anxiety. The SST shows a steady weakening of negative emotions as adults age. Older adults were found to sustain positive emotions more easily than

younger counterparts (Carstensen, Pasupathi, Mayr & Nesselroade, 2000). Logically, it can be theorized that repressive coping may be the cause for improved mood, less negative emotion and less anxiety. By using repressive coping, older adults have the ability to avoid negative information and focus on the positives.

According to Hamarat and colleagues (2002) older adults generally describe themselves as happier, less stressed, and prone to experience fewer negative emotions than younger adults. Carstensen speaks of a “positivity effect” where older adult participants look at past events in a more positive light than how they actually occurred (Carstensen et al., 2011). In an earlier study, Carstensen and colleagues reported that older adults were found to sustain positive emotions more easily than their younger counterparts. As age increases, the strength of negativity becomes significantly lesser for older adults (Gross et al., 1997).

Also as age increases, emotional complexity follows suit. This change is evidenced in the concurrent experience of positive and negative emotions in older adults (Lockenhoff et al., 2004). Older adults consistently report greater stability of emotions with increased age. Carstensen and her colleagues (2011) found that emotional well-being improves with age and levels off around the 7th decade. Those who allow both positive and negative emotions to coexist (affective complexity) within their lives possess greater emotional stability.

Research points toward a difference in bereavement responses between younger and older adults. Yet, a direct comparison between the two groups on attributes related to the emotional process of grieving is warranted. Perhaps the largest difference in bereavement between the two groups is the type of bereavement experienced. Loss of spouses is prevalent among older adults, as well as loss of friends and non-spousal family members. One-half of women and 12% of men above 65 years of age are considered widows (Williams et al., 2007). In

adolescents and college-age adults, bereavement from the death of a grandparent is most common (McCarthy, 2007). Balk et al., (2010) in a study focusing on the prevalence of bereavement among college students, found that 30% of participants were bereaved within the past 12 months, 39% having a loss within the past 24 months. 81.8% of participants were grieving the loss of a grandparent.

Three types of bereavement responses have been identified among older adults: common, resilient and chronic. Young adults have not yet been classified into these three groups. Common bereavement begins with high levels of grief and depression that decrease with time. Resilient older adults show the lowest grief scores and depression. In contrast, those belonging to the chronic group have the highest depression and grief levels. In one study, grief scores showed 59% of bereaved older adult spouses as common grievers, 34% as resilient and 17% showing chronic grief (Ott et al., 2007). Ott et al., measured grief scores with the Inventory of Complicated Grief-Revised (ICG-R: Prigerson et al., 1995b; Silverman et al., 2000). In this study, around 1 in 6 participants who lost a spouse had a longer lasting and troublesome bereavement compared to the other 5 participants.

Balk et al., (2010) studied the severity of bereavement among a college-age sample of young adults. The researchers looked for the prevalence of both normal bereavement and complicated grief reactions or “acute grief that never lessens” (p. 461). To study grief reactions, the study used Prigerson et al.’s (2008) revised Inventory for Traumatic Grief questionnaire. This inventory looks at “bereavement, separation distress, certain cognitive, emotional, and behavioral symptoms; and duration of at least 6 months” to identify complicated grief and prolonged grief disorder. Only two students in the bereaved within 12 months sample (1.7%) were categorized in the prolonged grief disorder group.

Comparing the grief scores between older and younger adults found in the above studies, one can see that a larger amount of older adults versus younger adults were classified into the “chronic group” or the group with prolonged grief, 17% older adults versus 1.7% younger adults. Even though these results were obtained in published studies, we must remember that these results may not necessarily generalize to the larger population. Since participants use self-reporting questionnaires, it is possible that participants may not be truthful. More likely is that those fitting the criteria of prolonged grief disorder are less likely to participate due to the burden of filling out surveys and possible trauma.

One prevalent similarity in bereavement between adolescents/younger adults and older adults is a lack of support during times of grief. Adolescents report having limited access to somewhere they can discuss their grief. They may have difficulty discerning what “normal” grief is, thus left feeling confused and/or guilty (Neal 2004, reported in McCarthy 2007). This can lead to social isolation, a problem also facing the older adults. Loss of a spouse among older adults can be the onset of feelings of isolation and missing structure. Often, bereaved older adults lack social support, which has been shown to help people get through their loss (Morgan, 1994).

Whether among older or younger adults, bereavement has the potential to infringe on all aspects of life including social, physical, and emotional aspects (Osterweis, Solomon, and Green, 1984, reported in Morgan 1994). The purpose of this study is to examine age differences in emotional responding, coping styles and grief among bereaved samples of older and younger adults. This study has the ability to provide a direct comparison of bereavement responding between the two age groups, which could be advantageous to the bereavement process. Since grieving is highly personalized, it is important to investigate possible similarities between

different age groups. Any knowledge acquired in this study further improves the ability for psychologists, counselors, etc. to understand bereavement in different age groups and use the most effective techniques for each cohort.

If the SST is correct, it may be helpful for bereaved younger adults to focus more so on emotionally meaningful relationships than the knowledge trajectory during their period of grief. Perhaps focusing on the emotional trajectory will help lower negative emotions and help the younger adults attend more to positive emotions and events, similar to their older counterparts. Another possibility in helping younger adults with bereavement is addressing the use of repressive coping. Statistically a larger majority of older adults are repressive copers than younger adults. Even though repressive coping usually happens unconsciously and automatically (Myers, 2000; Weinberger, 1990), it may be possible to teach repressive coping to younger adults, thus helping to decrease stress, anxiety and negative thoughts during the grieving process.

If the following hypotheses are supported, the SST will be supported even during times of bereavement. The SST theorizes that older adults report fewer negative emotions and show greater affective complexity. Instead of only applying to the broader selection of older adults, which may or may not have included a large percentage of bereaved individuals, SST will also apply to bereaved individuals who may have been less likely to participate in previous SST studies due to the added burden during times of grief.

Hypothesis 1. Older adults who have recently experienced bereavement will report fewer negative emotions than younger adults who have been bereaved.

Hypothesis 2. Older adults in bereavement will have a greater complexity of emotions than their younger counterparts.

Hypothesis 3. Older adults will report using repressive coping more than younger adults in response to bereavement.

Method

Participant Selection

Young adult participants (18 to 30 years old) in this study were undergraduate students at the University of Louisville recruited through the Department of Psychological and Brain Sciences online experiment sign-up system. Older adult participants for this study were 60 years or older and recruited throughout the Louisville area at senior centers, support groups, YMCAs, doctor's offices, Hosparus, etc. The final sample consisted of 110 younger adults and 51 older adults. On average, younger participants were 22.04 years old, $SD = 4.98$, primarily female (women = 86.36%, men = 13.64%), and had an average 5.56 months since loss, $SD = 3.93$. On average, older participants were 71.29 years old, $SD = 8.79$, primarily female (women = 82.35%, men = 17.65%), and had an average 5.98 months since loss, $SD = 3.54$.

Materials and Procedures

All procedures were in accordance with APA ethics guidelines. Participants were first screened to make sure they fit the criteria for this study. In order to participate, subjects had to be English-speaking and bereaved within the past year. This bereavement could be the loss of a spouse, close family member or friend, etc. Persons interested in taking part in the study who met the criteria for participation were either given a packet with instructions detailing how to complete the consent form and measures, or an online link to the study. Younger adults completed the survey online, while older adult participants received a paper version of the survey. The survey required an approximate time of 25-35 minutes to complete.

Measures

Positive and Negative Affect Schedule (PANAS). This scale is used to test the first and second hypotheses about negative emotions and affective complexity. The PANAS is comprised of two 10-item mood scales, measuring both positive affect and negative affect. High scores on the scales are indicative of higher levels of positive or negative affect (Watson et al., 1988). The correlation between positive and negative emotions (correlation between the Positive Affect (PA) and Negative Affect (NA) scales) has been used as an index of affective complexity (low correlation means higher affective complexity) (Coifman et al., 2007). Participants completed the PANAS for two different time frames: one month after loss (PANAS past variable) and at the time they took the questionnaire (PANAS present variable).

State Trait Anxiety Inventory (STAI) and Marlow-Crowne Social Desirability Scale (MC). Repressive coping is determined using the quartile-split technique to compare scores on the State Trait Anxiety Inventory (STAI) and Marlow-Crowne Social Desirability Scale (MC). A high score on the MC and low score on the STAI are indicative of repressive coping (Erskine et al., 2007). These measures are used to test the third hypothesis about the differential use of repressive coping between younger and older adults.

Inventory of Traumatic Grief (ITG). This questionnaire is often used to diagnose complicated grief. The sum of items 1-30 is used to measure the levels of grief. The higher the score on the ITG, the greater the grief symptoms displayed.

Design and Analyses

This study is cross-sectional in design. IBM SPSS 20.0 (IBM Corp., 2011) was used to analyze data. To analyze *Hypothesis 1*, we measured negative emotions using only the NA scale, in which higher NA scores suggest greater emotions. We calculated the mean NA scores, both

one-month after loss and at present, for younger and older adults. We then applied a t-test for independent samples. To analyze *Hypothesis 2* we correlated the average PA and NA scores within each group for their retrospective ratings one month after loss and their ratings at the time they completed the study measures. This yielded two correlations for the older group (both past and present) and two correlations for the younger group (both past and present). To compute whether the correlations for the young and older groups were significantly different, we applied a Fisher's Z Transformation. To analyze *Hypothesis 3* we used the quartile-split technique, in which participants who score under a 36 on the STAI and greater than 19 on the MC are identified as repressors (Erskine et al., 2007). We then applied a chi-square test to compare repressive coping scores between the two groups.

Missing Values

Unfortunately, when using self-report data there is a possibility of having missing values for participants. Missing data is a common occurrence in aging research because of factors that include increased age, poorer health and deficits in cognition (Chatfield & Matthews, 2005). Since we have a small sample size, it is important to use all available data.

For variables missing $\leq 10\%$ of items, we calculated item mean value single imputations. When completing the mean value imputations, we excluded participants who were missing $>10\%$ of a measured variable.

Results

Hypothesis 1. Older adults who have recently experienced bereavement will report fewer negative emotions than younger adults who have been bereaved.

No significant differences were found between younger adults ($M = 24.17, SD = 9.53$) and older adults ($M = 22.44, SD = 9.74$) in their retrospective ratings of negative emotions one

month after loss: $t(150) = 1.034, p = .303$. Also, no significant differences were found between younger adults, $M = 18.28, SD = 7.39$, and older adults, $M = 16.70, SD = 8.10$, in their ratings of negative emotions at the time they took the survey: $t(152) = 1.209, p = .229$.

When rating positive emotions retrospectively, no significant differences were found between younger adults, $M = 26.11, SD = 8.99$, and older adults, $M = 29.47, SD = 14.49$: $t(150) = -1.745, p = .083$. Also, no significant differences were found when younger adults, $M = 30.36, SD = 10.22$, and older adults, $M = 32.28, SD = 13.25$, reported their emotions at the time they took the survey: $t(152) = -.991, p = .323$.

Older adults did report slightly higher levels of grief, $M = 81.76, SD = 45.51$, compared to the younger sample, $M = 69.12, SD = 21.49$. This difference in grief scores was significant, $t(152) = -2.346, p = .020$.

Hypothesis 2. Older adults in bereavement will have a greater complexity of emotions than their younger counterparts.

The correlation between retrospectively rated positive and negative emotions for younger adults was $r(104) = -.357, p < .001$. For older adults, the correlation was not significant, $r(48) = -.063, p = .673$. The comparison of these two correlations using the Fisher's r to z transformation suggests that they were significantly different using a one-tailed comparison, $z = -1.73, p = .042$ which supports Hypothesis 2. Younger adults' correlation between rated positive and negative emotions at the time they took the survey was significant, $r(104) = -.239, p = .014$, as was the correlation for older adults, $r(50) = -.281, p = .048$. However, the comparison of these two correlations was not significant, $z = .26, p = .397$, which failed to support Hypothesis 2.

Both older and younger adults had a significant correlation between negative emotions presented presently and retrospectively: $r(152) = .775$, and $r(152) = .729, p < .01$, respectively. The

positive correlation between past and present negative emotions shows that negative emotions in both time periods, recalled and current, are strongly associated.

Hypothesis 3. Older adults will report using repressive coping more than younger adults in response to bereavement.

Nine younger adults were identified as repressive copers (8% of younger adult group), whereas twenty-five older adults (48.1% of older adult group) were so identified. A chi-square test of independence was performed to examine the relative frequency of repressive coping in the older and younger adult groups. The difference between these variables was significant $X^2(1, N = 164) = 34.65, p = .000$, which supports Hypothesis 3.

Discussion

This study examined the differences in negative emotions, affective complexity, and repressive coping between bereaved younger and older adults.

Hypothesis 1. Older adults who have recently experienced bereavement will report fewer negative emotions than younger adults who have been bereaved.

Our results showed that instead of reporting fewer negative emotions than younger adults who have been bereaved, older adults actually experienced similar levels of negative emotion. No significant age differences were found in either retrospective or current ratings.

These results contradict previous research by Mroczek and Kolarz (1998), which showed that older adults reported fewer negative emotions than their younger sample. The expectation for improved emotional experiences among older adults when compared to their younger counterparts can be traced to the Socioemotional Selectivity Theory. The SST theorizes that as older adults become more aware of their mortality, they tend to devote more time to meaningful

relationships, thus improving emotional experiences. One would think that in the face of losing a close loved one, older adults would become more aware of their mortality, thus tending to focus on the positives. Since our study does not show older adults reporting fewer negative emotions or more positive emotions, it can be argued that the SST does not provide a good explanation of how the older adults in this study responded to bereavement.

Perhaps the reason for our difference in findings lies in the relationship the older and younger adults had to their lost loved ones. Table 1 shows that the majority of older adults lost their spouses, while the majority of younger adults lost extended family members or loved ones in the other category. If it is assumed that spouses are often closer than extended family, and losing a spouse leads to more intense grieving, this could explain the failure to find support for the SST in this sample. If previous research holds true and older adults would normally have fewer negative emotions, perhaps dealing with more difficult bereavement would bring their negative emotion level with younger adults who are not affected as greatly by their losses. If our younger adult sample had experienced closer losses (e.g. parent, sibling, spouse), they might have reported even more negative emotions.

Table 1: What is your relationship to your lost loved one?

	Spouse	Parent	Son	Daughter	Extended Family (cousin, aunt, uncle, etc.)	Grandchild	Other	Total
Younger Adults	1 (.9%)	1 (.9%)	0 (0%)	5 (4.5%)	39 (35.1%)	23 (20.7%)	42 (37.8%)	111
Older Adults	24 (46.1%)	2 (3.8%)	4 (7.7%)	2 (3.8%)	4 (7.7%)	0 (0%)	16 (30.8%)	52
Total	25	3	4	7	43	23	58	163

The grieving of different losses may be why our older adult sample had significantly higher ITG (Inventory of Traumatic Grief) scores (Table 2). The difference between means shows that older adults in our study were in fact reporting more grief from their losses than their younger counterparts. The grief scores support the idea that if both groups were experiencing the same level of grief, there might have been more chance to find support for my hypothesis.

Table 2: Grief Scores from ITG

	N	Mean	Standard Deviation
Younger Adults	106	69.12	21.49
Older Adults**	48	81.76	45.51

** Significant (2-tailed): $t(152) = -2.346$, $p = .020$

Hypothesis 2. Older adults in bereavement will have a greater complexity of emotions than their younger counterparts.

Our retrospective findings on affective complexity are consistent with previous research, but our findings at the time the survey was taken are not. Carstensen et al., 2000 found that older adults showed greater complexity of emotion than younger adults. In our results, both age groups had low correlation between current positive and negative affect. A low correlation between the positive and negative emotions is indicative of affective complexity. Our Fisher's Z Transformation showed that, at the time of completing the questionnaires, older and younger adults did not report differences in affective complexity. This finding fails to support the hypothesis.

In affective complexity, positive and negative emotions are experienced simultaneously. A high negative correlation shows that higher negative emotion is associated with higher positive

emotion, thus less affective complexity. In bereavement, having affective complexity means that the person experiencing loss will have greater ability to regulate emotions than someone who does not have affective complexity. The low correlation suggests that participants would be experiencing a mix of positive and negative emotions – that is, even though they might have high negative emotion, they also can experience high positive emotion.

In regards to the PANAS-past variable, which includes retrospectively reported positive and negative affect data, the hypothesis was supported. The younger adult group reported higher correspondence between positive and negative affect than the older adult group whose recalled positive and negative affect were independent of one another. This finding supports the prediction that older adults would have greater affective complexity.

Overall, at one-month post loss, older adults show more affective complexity than younger adults. However, this difference disappeared at the time the survey was taken, on average 6-12 months after the loss. The SST discusses how when looking into the past, older adults tend to see events in a more positive light than their younger counterparts. Our research corresponds to this theory. Older adults retrospectively reported their emotions one month after loss with a mix of positive and negative, versus their current state, which was reported more negatively.

Hypothesis 3. Older adults will report using repressive coping more than younger adults in response to bereavement.

Previous research has shown that older adults use repressive coping more often than younger adults. In this bereaved sample, the percentage of repressive copers was significantly higher in the older adult sample compared to that of the younger adults, which is consistent with previous research.

This finding effectively shows resilience in bereavement, as repressive coping has been shown to help bereaved repressors adjust better over the long term and cope with aversive events (Coifman et al., 2007), more so than those who do not use a repressive coping style. Since our research shows the older adults in our sample use repressive coping more than the younger adults, it is not surprising that our older adult sample showed a greater complexity of emotions when rating emotions retrospectively. It is typical for repressors to omit negative memories when asked about their past, which may be why the older adults had a greater balance of positive and negative emotions in their retrospective ratings and not an overwhelming amount of negative ratings versus their present ratings.

Limitations and Future Research

The most prominent limitations of this research are the smaller sample size for older adults in relation to the younger adult sample size, and the overall small sample selection for both groups. The younger adult sample was recruited mainly through university research, so the sample is comprised largely of college students. Since students were given research credit for participating in the study, it is possible that some of the participants could have lied about meeting the main study requirement of being bereaved within one year at the time they participated. Also the entire age range of the younger adult group, 18 to 30 years old, was not represented as most college students are ages 18-22. Our older adult sample is not entirely representative of the average population since recruitment took place mainly in grief-support groups and senior centers. Both samples consisted of mainly female participants and few male participants. Also, since our study required participants to fill out a lengthy questionnaire, it is possible that we did not attract the most grief stricken to our study. In times of high stress and grief, it may be more difficult for people to concentrate and complete a lengthy questionnaire.

Our limitations affect how we interpret the data and apply it to a broad array of people. To have a better representation of bereaved individuals in our study, we would need a larger older adult sample, and an overall sample that is more representative of the different types of griever, both young and old. If these findings hold true with a larger sample size and more diverse sample selection, the data will be more reliable when we generalize it to a larger group of people.

This study suggests that it may be beneficial to conduct more research related to Socioemotional Selectivity Theory specifically as it applies to bereavement. In our study, we found that older adults viewed their past in a more positive light than their current emotions. However, if the older adults completed the PANAS one month after the loss instead of retrospectively, would this finding still hold true? If the PANAS was not taken retrospectively and older adults showed more negative emotions as they did with the PANAS taken at the time of the questionnaire, this would weaken the applicability of SST to this population.

Future studies should have equal representations of old and young adults in their participant groups, as well as larger sample sizes. To collect a more diverse sample size in terms of grief, it may be better to create a smaller questionnaire for future research. A smaller questionnaire would also help avoid large amounts of missing data. With our small sample size, missing data is a concern. Calculating the mean value and putting it in the place of variables missing $\leq 10\%$ of items helps us get closer to representative findings, but it is still not as accurate as if the participant had completed the items. Since the amount of missing data for the variables analyzed was not high, it should not have had any real effect on our outcomes.

To more accurately address affective complexity, instead of using a correlation between the Positive Affect and Negative Affect scales, it would have been beneficial to create individual

scores for each participant, rather than overall group scores. Using the PANAS, subscale scores for both PA and NA could be calculated. Scores closer to zero would indicate greater affective complexity because of lesser distance between the scores from the PA and NA scales (Shah, 2013). If this is done, each participant will have an affective complexity score, and a t-test test could be performed to examine the relative frequency of affective complexity in the two groups.

Summary

Overall, a portion of our research is consistent with previous research, while other parts are contradictory. Older and younger adults reported similar levels of negative emotion, which contradicts previous research. However, older adults did report significantly higher levels of grief. Hypothesis 2 was partially supported in that an age difference in affective complexity was found in the retrospective ratings, but not at the time the survey was taken. Hypothesis 3 was supported, as the difference in percentage of repressive copers was significant.

It is hard to make generalizing statements from our findings since our sample size and variety are limited. The finding that older adults were dealing with higher levels of grief, yet reporting no more negative emotions than their younger counterparts suggests resiliency in bereavement among the older group. This idea of resiliency is also supported in the finding of greater affective complexity in the recalled emotions of older versus younger participants, as well as older adults' greater use of repressive coping.

Despite the many contradictions to previous research, this study is still beneficial because it shows that how younger and older adults cope and deal with grief may not be as different as we think. If older adults do indeed have similar levels of negative emotion to younger adults rather than lower as we expected, grief services may need to start addressing this issue. It is

possible that in these similarities, future methods for dealing with grief can be developed and implemented to better help younger and older adults.

References

- Balk, D., Walker, A., & Baker, A. (2010). Prevalence and severity of college student bereavement examined in a randomly selected sample. *Death Studies, 34*, 459-468.
- Brandtstadter, J., & Renner, G. (1990). Tenacious goal pursuit and flexible goal adjustment: Explication and age-related analysis of assimilative and accommodative strategies of coping. *Psychology and Aging, 5*(1), 58-67.
- Bugge, K., Haugstvedt, K., Rokholt, E., Darbyshire, P., & Helseth, S. (2012). Adolescent bereavement: embodied responses, coping and perceptions of a body awareness support programme. *Journal of Clinical Nursing, 21*, 2160-2169.
- Carstensen, L. L., Mayr, U., Pasupathi, M., & Nesselroade, J. R. (2000). Emotional Experience in Everyday Life Across the Adult Life Span. *Journal Of Personality & Social Psychology, 79*(4), 644-655.
- Carstensen, L. L., Mikels, J. A., & Mather, M. (2006). Aging and the intersection of cognition, motivation, and emotion. *Handbook of the Psychology of Aging, 343-362*.
- Carstensen, L., Charles, S., & Mather, M. (2003). Aging and emotional memory: the forgettable nature of negative images for older adults. *Journal of Experimental Psychology: General, 132*(2), 310-324.
- Carstensen, L. L., Turan, B., Scheibe, S., Ram, N., Ersner-Hershfield, H., Samanez-Larkin, G. R., & ... Nesselroade, J. R. (2011). Emotional experience improves with age: Evidence based on over 10 years of experience sampling. *Psychology And Aging, 26*(1), 21-33.
- Chatfield, M. D., Brayne, C., Matthews, F. (2005). A systematic literature review of attrition between waves in longitudinal studies in the elderly shows a consistent pattern of dropout between differing studies. *Journal of Clinical Epidemiology, 58*, 13-19.

- Coifman, K. G., Bonanno, G. A., & Rafaeli, E. (2007). Affect dynamics, bereavement, and resilience to loss. *Journal of Happiness Studies, 8*, 371-392.
- Coifman, K. G., Bonanno, G. A., Ray, R. D., & Gross, J. J. (2007) Does repressive coping promote resilience? Affective-autonomic response discrepancy during bereavement. *Journal of Personality and Social Psychology, 92*(4), 745-758.
- Diehl, M., Coyle N., & Labouvie-Vief, G. (1996). Age and sex differences in strategies of coping and defense across the life span. *Psychology and Aging, 11*(1), 127-139.
- Erskine, J. K., Kvavilashvili, L., Conway, M. A., & Myers, L. (2007). The effects of age on psychopathology, well being and repressive coping. *Aging & Mental Health, 11*(4), 394-404
- Gross, J. J., Carstensen, L. L., Pasupathi, M., Tsai, J., Goettestam Skorpen, C., & Hsu, A. Y. C. (1997). Emotion and aging: Experience, expression, and control. *Psychology & Aging, 12* (4), 590–599.
- Hamarat, E., Thompson, D., Steele, D., Matheny, K., & Simons, C. (2002). Age differences in coping resources and satisfaction with life among middle-aged, young-old, and oldest-old adults. *The Journal Of Genetic Psychology: Research And Theory On Human Development, 163*(3), 360-367.
- Löckenhoff, C. E., & Carstensen, L. L. (2004). Socioemotional Selectivity Theory, Aging, and Health: The Increasingly Delicate Balance Between Regulating Emotions and Making Tough Choices. *Journal Of Personality, 72*(6), 1395-1424.
- McCarthy, J. (2007). ‘They all look as if they’re coping, but I’m not’: The relational power/lessness of ‘youth’ in responding to experiences of bereavement. *Journal of Youth Studies, 10*(3), 285-303.

- Morgan, J. (1994). Bereavement in older adults. *Journal of Mental Health Counseling, 16*(3), 318-326.
- Mroczek, D., & Kolarz, C.M. (1998). The effect of age on positive and negative affect: A developmental perspective on happiness. *Journal of Personality and Social Psychology, 75*, 1333-1349.
- Myers, L. B. (2010). The importance of the repressive coping style: findings from 30 years of research. *Anxiety, Stress & Coping, 23*(1), 3-17.
- Ott, C., Lueger, R., Kelber, S., & Prigerson, H. (2007). *The Journal of Nervous and Mental Disease, 195*(4), 332-341.
- Riediger, M., Li, S. C., & Lindenberger, U. (2006). Selection, optimization, and compensation as developmental mechanisms of adaptive resource allocation: Review and preview. *Handbook of the Psychology of Aging, 289-313*.
- Shah, S. (2013). Resilience in late-life bereavement: disentangling the relationship between resilience and cumulative lifetime loss. Unpublished dissertation, University of Louisville, Louisville, KY.
- Stroebe, M. S., Hansson, R. O., Schut, H., & W. Stroebe, W. (Eds.). (2008). *Handbook of Bereavement Research and Science: Advances in Theory and Intervention*. Washington, DC: American Psychological Association.
- Watson, D., Clark, L., & Tellegan, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063-1070.
- Weinberger, D.A. (1990). The construct validity of the repressive coping style. In J.L. Singer (Ed.), *Repression and dissociation* (pp. 337-386). Chicago, IL: University of Chicago

Press.

Williams, B., Baker, P., Allman, R., & Roseman, J. (2007). Bereavement among african american and white older adults. *Journal of Aging and Health, 19*(2), 313-333.