# NARRATIVE & MEANING: THE EFFECTS OF AUTOBIOGRAPHICAL

## REASONING VS MEMORY REEXPERIENCING IN LIFE REVIEW ON MEANING IN LIFE

## IN YOUNG ADULTS

A Thesis

by

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### ABSTRACT

Despite their many commonalities, there is little research exploring connections between narrative and existential psychology. This experiment aimed to begin to bridge the gap between fields by examining the effects of a narrative life review interview intervention on meaning in life in a theoretically interesting but surprisingly understudied population: young adults. In addition, this study attempted to isolate the mechanism—autobiographical reasoning or memory reexperiencing—that causes the benefits witnessed in life review interventions. To this end, it employed a three-by-one (autobiographical reasoning versus memory reexperiencing versus control) design with post-intervention quantitative existential outcome measures reported at two time points by 212 participants. Repeated-measures MANOVA effects showed better performance by the autobiographical reasoning condition than the memory reexperiencing condition on mattering and coherence as well as better performance across all outcome measures when mediated by self-as-context. However, there was little differentiation between autobiographical reasoning and the control, and the control led to better psychological results than memory reexperiencing on all outcome measures. Possible reasons for the unexpected results are explored. Overall, the experiment suggests memory reexperiencing in life review is insufficient to cause psychological benefits when isolated from autobiographical reasoning, providing tentative support for the autobiographical reasoning hypothesis.

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#### Introduction

## Narrative and Existential Psychologies

Narrative psychology and existential psychology are two offshoots of the same postmodern roots which have grown distinct, but potentially cross-fertile, clinical applications. The two fields' fundamental theories are compatible: Narrative psychology's central tenet is the constructionist view that there is no "true self." Rather, your "self" or "identity" is something you construct from your experiences by telling stories about them, both to yourself and to the world (McAdams, 1993; Payne, 2011). Existential psychology likewise denies the existence of a true self but counts the drive towards knowledge of who you "really" are and related concepts, such as authenticity, as existential motivators worthy of scientific inquiry. More central still is the Will to Meaning—the urge of each individual to live in a way that is idiosyncratically and subjectively meaningful—which is existential psychology's raison d'etre according to the field's founder, Victor Frankl (2000). However, to glean how truly complementary narrative and existential psychology are, one must look to their clinical applications.

Narrative interventions can refer to a range of approaches that focus on using people's autobiographical narratives in therapeutic ways (Payne, 2011). The most basic of these approaches is simple reminiscence. Simple reminiscence involves encouraging people to recall positive events from their past and recount them as stories (Pinquart & Forstmeier, 2012). The next step up in complexity is called life review, which involves getting someone to tell you their entire life story, focusing on how and why they have changed over time, while you help them reevaluate and integrate both positive and negative life events into a coherent life narrative (Pinquart & Forstmeier, 2012). Both Bohlmeijer, Smit, and Cuijpers' (2003) meta-analysis of 20 studies and Pinquart and Forstmeier's (2012) meta-analysis of 95 studies showed simple reminiscence has some benefit in reducing depressive symptoms and increasing life satisfaction

but that life review is more effective at treating geriatric depression. Life review has also been shown to increase feelings of meaning in life, self-esteem, and promote a more positive view of both the past and future (Bohlmeijer, Westerhof, & Jong, 2008). Clearly, narrative therapeutic approaches cause benefits in both general mental health and existential mental health; however, how it causes these benefits is a point under contention.

The most well-known theory is that narrative interventions operate by promoting a sense of global coherence in people by engaging them in autobiographical reasoning, the process of establishing links between your past experiences, present identity, and projected future that is necessary for people to construct a "narrative identity" (Your autobiographical retelling of your life story is your narrative identity per se.) (Habermas & Bluck, 2000). In this narrative context, global coherence can be separated into two interrelated forms: Causal coherence, wherein you can clearly delineate the ways that various life experiences have changed both your external circumstances and who you are as a person, and thematic coherence, wherein you are aware of consistent life themes created by the temporal repetition of similar events (Habermas & Silveira, 2008).

Coherence is also a key concept in existential psychology. according to the tripartite model of meaning, coherence is one of three components and/or precursors to meaning, alongside purpose and mattering. in this model, coherence is defined as the extent to which individuals "feel that their life makes sense and that things in their life are clear and fit together well", purpose as "the degree to which individuals experience their lives as being directed and motivated by valued life goals", and mattering as "the extent to which individuals feel that their existence is of significance, importance, and value in the world" (George & Park, 2017). Existential interventions aim to increase people's sense that their existences are meaningful,

often by targeting one or more of the tripartite components (Yalom, 1980; Schneider & Krug, 2017). Meaningfulness, in turn, is strongly associated with a plethora of psychological benefits including increased well-being, life satisfaction, positive affect, self-esteem, happiness, prosociality, and lower negative affect and depressive symptoms (Leontiev, 2013; Lambert, Stillman, Baumeister, Fincham, Hicks, & Graham, 2010). since narrative and existential psychology's definitions of coherence are essentially the same (with narrative psychology's definitions merely being more specifically articulated), coherence contributes directly to meaning in life, and meaning in life is associated with the same psychological benefits as life review, a potential narrative for how narrative interventions improve mental health begins to emerge. This narrative can best be illustrated in the context of a specific subset of the population: young adults.

#### Narratives, Identity, and Meaning in Young Adults

In spite of evidence that narrative interventions are equally effective for adults of all ages, the majority narrative psychology research has concentrated on elderly populations, perhaps because the retrospective focus of narrative interventions seems particularly well-suited for people whose futures are comparatively limited (Payne, 2011). Nevertheless, a considerable amount of research has also been directed toward adolescents and young adults. This focus on the young has been justified by Eriksonian developmental theory, which states that late adolescence and young adulthood is the developmental period in which the most effort is put forth into formulating a cohesive identity and that the primary function of identity is to provide people with a sense of temporal continuity (i.e. coherence) (Erikson, 1950). Erikson believed that college, in particular, is a time and place where people have a unique opportunity to explore new ideas and possibilities in order to construct identities that confer a sense of personal purpose and

meaning. Modern research supports this view (McLean, Pasupathi, & Pals, 2007; Schwehn & Bass, 2006). Furthermore, McAdams and Guo (2014) suggest the Life Story Interview (a specific life review paradigm notable for its relative brevity) can aid college-age individuals in developing an identity in two major ways: First, by promoting authentic self-exploration, and, second, by encouraging contemplation of future goals.

The Life Story Interview (McAdams, 1993) engages interviewees in causal autobiographical reasoning by asking them to recount personally significant positive and negative experiences and link each one to the person they are now. According to McAdams and Guo (2014), to be authentic is to present yourself as you truly believe yourself to be. As such, simply answering the Life Story Interview's questions honestly is acting authentically and ought to increase interviewees' feelings of authenticity, which, in positive psychology, is an end in itself as well as something associated with meaningfulness and well-being. Additionally, this manner of self-exploration should directly increase feelings of causal coherence, and, in theory, existential coherence.

It is difficult to imagine a complete and coherent sense of identity that does not include a vision of what you want to do in the future, and it is to this area that the Life Story Interview turns next. After grounding interviewees with a thorough discussion of their pasts, the interview asks about their goals and dreams not just for the immediate future but across their entire lifespans—that is, their existential purpose. College students most often answer these questions about life purpose in terms of career paths, and often in terms of vocation (McAdams & Guo, 2014). Vocation is work that is personally meaningful, typically because it is generative or, in other words, has a positive effect on the world (McAdams & Guo, 2014). Generativity is one of

the primary pathways to achieve a sense of existential mattering (Hofer, Busch, Au, Šolcová, Tavel, & Wong, 2014; de St. Aubin, 2013).

Personal identity and personal meaning are entwined, so it is fitting that the theories of narrative identity fit so very closely with the tripartite model of meaning. We can see clearly how life review can directly increase coherence and purpose, how coherence can provide a foundation to support a clear vision of purpose, and how having that purpose can increase one's sense of mattering. if all three components of meaning are bound together in this way, a significant increase in one's overall sense of meaningfulness, along with the many associated psychological benefits, ought to result. And, if McAdams and Guo's theory (2014) is correct, all of these outcomes are achievable in a college student population through the Life Story Interview. However, as of yet, there have been no studies explicitly examining the relationship between narrative interventions and the tripartite model and no experiments exploring the outcomes of utilizing life review with young adults. Thus, one of this study's purposes was to experimentally test all of these theorized relationships between narrative identity-making processes and existential meaning-making outcomes.

## Life Review: Another Interpretation

As mentioned previously, while the benefits of life review are well-documented, the mechanisms through which life review achieves those benefits are unverified. The theory discussed above, which I call the Autobiographical Reasoning Model, is opposed by another theory that I call the Memory Reexperiencing Model. Another purpose of this study was to determine which of these two models best explains the positive outcomes of life review.

Because of the well-documented association that people with worse negative affect tend to also have more overgeneralized autobiographical memories (i.e. difficulty recalling life events

with specificity), Serrano, Lattore, Gatz, and Montanes (2004) have theorized that improving the specificity or vividness of autobiographical memory will lead to improved affect. They hypothesized that improving autobiographical reexperiencing is the mechanism by which life review, which asks individuals to recount specific life events in detail, achieves psychological benefits. Their study used a form of life review that did not involve explicit autobiographical reasoning; instead, it only asked participants to describe specific memories in vivid detail. Their life review paradigm improved people's capacity for memory reexperiencing as well as affect and levels of life satisfaction, providing some evidence for their hypothesis. Similarly, an experiment tested a life review paradigm without autobiographical reasoning that had participants describe their lives' worst experiences in vivid detail versus simple reminiscence on their worst experiences versus a control condition in which experimenters talked with participants about a non-autobiographical topic of mutual interest (e.g. football, American history) (Fry, 1983). The study found that the life review paradigm focused on memory reexperiencing caused greater improvements in affect and ego-integrity (a construct related to coherence) than the other conditions (although simple reminiscence was better than the nonautobiographical control), and Fry interpreted this effect was caused by forcing participants to stop avoiding painful experiences through overgeneralized memory retrieval and allowing them to re-integrate these experiences. These findings provide experimental evidence that explicit autobiographical reasoning is not necessary for life review to increase positive affect or coherence.

However, while these studies provide a feasible alternative explanation to the Autobiographical Reasoning Model for the utility of life review, their evidence was insufficient to either disprove the Autobiographical Reasoning Model or prove the Memory Reexperiencing

Model. What was required was an experiment that tested an autobiographical reasoning life review paradigm against a memory reexperiencing life review paradigm.

#### The Present Study

In order to determine whether the Autobiographical Reasoning Model or the Memory Reexperiencing Model better explains the psychological benefits of life review, participants took part in one of two experimental conditions or a control condition. The experimental conditions consisted of different versions of the Life Story Interview's Key Events Section (McAdams, 1993)—one in which interviewers asked participants to engage in explicit causal autobiographical reasoning and one in which interviewers asked participants to engage in vivid and specific remembrance and discouraged explicit autobiographical reasoning. The control condition consisted of an interview about the participant's previous day.

Subsequently, each participant answered a secondary section adapted from the Life Story Interview concerning their future plans and dreams, potential obstacles they envision to their goals, and how they intend to deal with those obstacles (This interview was an outcome measure and was the same between conditions). Each participant also answered one series of questionnaires immediately after the interview and another at a one-week follow-up that each consisted of a mix of existential and mental health outcome measures. I intended this to help determine how narrative interventions are psychologically beneficial within an existential framework.

I hypothesized that participants in the autobiographical reasoning condition would experience a greater sense of coherence than participants in the other conditions because causal autobiographical reasoning about life experiences is how people are able to create cogent life narratives from disparate events (McAdams, 1993). Likewise, through direct effects and effects

mediated by coherence, i expected participants in the autobiographical reasoning condition to demonstrate a stronger sense of purpose and to experience greater senses of mattering, meaningfulness, authenticity, and other positive mental health outcomes than the other conditions.

I further predicted that participants in the memory reexperiencing condition would experience better existential and general mental health outcomes than those in the control condition for two reasons: First, because the memory reexperiencing condition asks participants to think of and relate important events from multiple periods in their life, which sets the foundation for autobiographical reasoning even though such reflection will be discouraged during the interview. Second, because the memory reexperiencing condition requires participants to recall at least one important negative life event and retelling negative life events is considered crucial to attaining psychological benefits from life review (Fry, 1983; Pals, 2006). Therefore, while I hypothesized that positive outcomes from both experimental conditions would be maintained or increase during the one-week interval since their participation, I expected that participants in the memory reexperiencing condition would experience the largest increases in positive outcomes during the follow-up, as the intervening week would provide them an opportunity for the autobiographical reasoning that participants in the autobiographical reasoning condition began during the first part of the study.

### Methods

#### **Participants**

287 undergraduate students at Texas A&M were recruited through the online SONA portal in exchange for credits toward their requirements for psychology courses. The data from

65 participants who answered an integrity check "My data are invalid; I just clicked through the study or otherwise did not take part seriously." and the Time 2 data from participants who took more than three days to respond to the follow-up survey was excluded from the final analysis. The remaining sample consisted of 71 men, 139 women, and 2 genderqueer individuals aged 18-26 (M = 18.69, SD = 1.11). The participants were 81.6% White, 8.5% Asian, 3.8% Black/American American, 2.8% Multiracial, 1.9% Indian, .5% Native American, .5% Native Hawaiian/Pacific Islander, and .5% other.

The experiment was a three (Autobiographical Reasoning vs. Memory Reexperiencing vs. control) by one between-subjects experimental design with a secondary within-subjects analysis between initial data collection and a one-week follow-up. This allowed each condition to have approximately 71 participants, which was near the sample size needed to detect an effect of r = .21, the effect size recommended by social psychological best practices when the relevant literature contains no established effect size (Funder, Levine, Mackie, Morf, Sansone, Vazire, & West, 2014).

#### **Materials**

Meaning, Coherence, Purpose, Mattering: Participants completed the Multidimensional Meaning in Life Scale at both time points (Costin & Vignoles, 2019). The scale is composed of separate subscales for Meaning in Life Judgments, Cosmic Mattering, Coherence, and Purpose. *Global Meaning* is composed of four items (e.g. "My life as a whole has meaning."; "My existence is empty of meaning."). *Cosmic Mattering* is composed of four items (e.g. "Even considering how big the universe is, I can see that my life matters."; "My existence is not significant in the grand scheme of things."). *Coherence* is composed of four items (e.g. "Looking at my life as whole, things seem clear to me."; "I can't make sense of events in my life."). *Purpose* is composed of four items (e.g. "I have a good sense of what I am trying to accomplish in life."; "I don't have compelling life goals that keep me going."). In each subscale, participants rated their agreement with each item on a scale from one ("Strongly Disagree") to seven ("Strongly Agree").

**Meaninglessness:** Participants took the Crisis of Meaning Scale (Schnell & Becker, 2007) at both time points to evaluate the extent to which they felt an immediate lack of existential meaning in their lives. The scale is composed of five items (e.g. "My life seems meaningless."; "I don't see any sense in life."). Participants rated their agreement with each item on a scale from one ("Strongly Disagree") to seven ("Strongly Agree").

Authenticity: The Authenticity Personality Scale (Wood, Linley, Maltby, Baliousis, & Joseph, 2008) was administered at both time points. The Authentic Personality Scale is comprised of three subscales intended to gauge different facets of authenticity: *Self-Alienation* (i.e., awareness of one's physiological states, emotions, and cognitions), *Authenticity* (i.e., congruence between one's behavior and one's physiological states, emotions, and cognitions), and *Openness to External Influence* (i.e., the extent to which one believes they must conform to others' expectations). Participants rated their agreement with each item in all three subscales on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*).

Life Satisfaction: Participants took the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) at both time pints. The scale is composed of five items (e.g. "I am satisfied with my life."; "If I could live my life over, I would change almost nothing.") Participants rated their agreement with each item on a scale from one ("Strongly Disagree") to five ("Strongly Agree").

**Positive and Negative Affect**: Participants took the Positive and Negative Affect Schedule (Zevon & Tellegen, 1984) at both time points in order to test their state affect. Participants rated to what extent they felt certain positive (e.g. "Happy") or negative (e.g. "Angry") emotions "right now" on a scale from one ("very slightly or not at all") to five ("extremely").

**Experiential Avoidance:** At both time points, participants took the Brief Experiential Avoidance Scale to measure the extent to which they try to avoid unpleasant experiences (Gámez, Chmielewski, Kotov, Ruggero, Suzuki, & Watson, 2014). The scale is composed of fifteen items (e.g. "One of my big goals is to be free from painful emotions."; "I'm quick to leave situations that makes me uneasy.") Participants rated their agreement with each item on a scale from one ("Strongly Disagree") to seven ("Strongly Agree").

**Self-as-Context:** At both time points, participants took the Self-as-Context Scale (Zettle, Gird, Webster, Carrasquillo-Richardson, Swails, & Burdsal, 2018). The scale is composed of 10 items (e.g. "Despite the many changes in my life, there is a basic part of who I am that remains unchanged."; "There is a basic sense I have of myself that doesn't change even though my thoughts and feelings do."). Participants rated items on a scale from one ("Strongly disagree") to seven ("Strongly agree").

Valued Living: At the second time point only, participants took the Valued Living Questionnaire (Wilson, Sandoz, Kitchens, & Roberts, 2010). In it, participants rated how important ten different commonly valued domains (e.g. "Family Relations"; "Education/training") were to them and then how consistent their actions over the past week had been with each valued domain. Each subsection was rated on a scale of one ("Not at all important"/"Not at all consistent") to ten ("Extremely important"/"Extremely consistent").

**Prosocial Intentions**: At the second time point only, participants took the Prosocial Behavioral Intentions Survey (Baumsteiger & Siegel, 2019) and the Intentions to Help Solve Problems in the World Questionnaire (Nadolny, 2010). The former scale consists of four questions asking how likely participants would be to engage in concrete prosocial behaviors (e.g. "Assist a stranger with a small task (e.g., help carry groceries, watch their things while they use the restroom)"; "Comfort someone I know after they experience a hardship") on a scale of one ("Definitely would not do this") to seven ("Definitely would do this."). The latter scale consists of six statements about the general desire to improve the world (e.g. "It is important to me to help others in need."; "I strive to make the world a better place.") that participants rated the extent to which they agreed or disagreed on a scale of one ("Strongly disagree") to seven ("Strongly agree").

## Procedure

Prior to their appointments, each participant was randomly assigned to one of the three experimental conditions and one of two subcategories within each experimental condition (The subcategories counterbalanced the two outcome measures immediately following the experimental condition—the questionnaire and the secondary portion of the interview. [See Appendix B for a complete procedural script for each condition and subcategory.]) At their scheduled time, each participant was contacted through SONA to join a Zoom meeting with an interviewer. The interviewer introduced themself and sent the participant a link to a Qualtrics survey which contained the consent form. Once the consent form was explained and signed, the interviewer started recording and began the interview.

For both the autobiographical reasoning (1) and the memory reexperiencing (2) conditions, the interview consisted of asking participants to recount in detail five key life events

in the following order: An important childhood memory, an important adolescent memory, a peak experience or high point, a rock bottom experience or low point, and an additional important memory from any point in their lives. The difference between the two conditions was that in 1, the interviewers asked follow-up questions after each key event that engaged the participant in autobiographical reasoning (e.g. "How did your life change after this event?"; "How did this event influence the person you are today?"), whereas in 2, interviewers guided participants away from autobiographical reasoning and instead asked questions that helped participants recount each event in as much vivid detail as possible (e.g. "Can you tell me more about how you felt emotionally during each part of this event?"; "Can you describe your sensory experiences during the event in greater detail? What did you see, hear, smell, etc.?") In the control condition (3), participants were asked to recount the events of their previous day in as much detail as possible. In all conditions, the interviewers guided the participants so that this portion of each interview lasted between 30 and 40 minutes.

After completing the experimental condition, participants either took a series of questionnaires or continued to a secondary interview, according to their subcategories. The survey and the secondary interview were the same for every participant, and every participant participated in both, but the order in which they occurred was randomized. The secondary interview asked participants to discuss their future dreams and goals, what appealed to them about those dreams and goals, what potential obstacles they foresaw potentially getting in the way of them accomplishing their goals as well as how they foresaw themselves overcoming those potential obstacles. The interviewers guided the participants so each secondary interview lasted between 10 and 20 minutes.

One week after their initial participation, participants were sent an automated follow-up survey that included some of the same measures from the first survey as well as some new measures. After completing these questionnaires, participants were debriefed, and their participation was complete.

#### Results

#### **Repeated Measures MANOVA**

Data analysis was performed using the IBM SPSS Statistics 26 package. I computed a repeated-measures between-factors MANOVA to test the effect of experimental condition on global meaning, coherence, cosmic mattering, purpose, meaninglessness, life satisfaction, positive affect, negative affect, authenticity, experiential avoidance, and self-as-context at the study's two time points.

There was a statistically significant difference in cosmic mattering between at least two groups (F(2,209) = 4.19, p = .017, partial  $\eta^2 = .039$ ). Tukey's HSD Test for multiple comparisons found that the mean value of cosmic mattering was significantly higher in the autobiographical reasoning than the memory reexperiencing condition (p = .005, 95% *C.I.* = .19, 1.05).

There was a statistically significant difference in self-alienation between at least two groups (F(2,209) = 3.25, p = .041, partial  $\eta^2 = .031$ ). Tukey's HSD Test for multiple comparisons found that the mean value of self-alienation was significantly higher in memory reexperiencing than the control condition (p = .013, 95% *C.I.* = .11, .91).

There was a statistically significant difference in Self-as-Context between at least two groups (F(2,209) = 4.26, p = .015, partial  $\eta^2 = .040$ ). Tukey's HSD Test for multiple

comparisons found that the mean value of self-as-context was significantly higher in the control than the memory reexperiencing condition (p = .010, 95% C.I. = .12, .63).

There was a statistically significant difference in Negative Affect between at least two groups (F(2,209) = 4.35, p = .004, partial  $\eta^2 = .052$ ). Tukey's HSD Test for multiple comparisons found that the mean value of negative affect was significantly higher in the autobiographical reasoning condition than the control (p = .014, 95% *C.I.* = .05, .48) and significantly higher in the memory reexperiencing condition than the control (p = .002, 95% *C.I.* = .13, .56).

There was no statistically significant difference in Coherence between at least two groups  $(F(2,209) = 2.30, p = .102, \text{ partial } \eta^2 = .022)$ . Tukey's HSD Test for multiple comparisons found that the mean value of coherence was significantly higher in the autobiographical reasoning than the memory reexperiencing condition (p = .044, 95% *C.I.* = .008, .62).

There were no significant differences found between at least two groups for any of the other dependent variables.

### Mediation

Self-as-context is a construct that represents people's ability to take a transcendental or observing perspective to their thoughts, feelings, and experiences, identifying more with an enduring, unchanging "I" than with the autographical "facts" of their life (Dahl, 2010). In relational frame theory, self-as-context is thought to be the truest version of the self, and, as such, is related to authenticity (Dalh, 2010). Likewise, it is considered the only aspect of a person that remains unchanged and consistent from birth to death and is, as such, related to coherence. Although empirical research on self-as-context is a new area, it has already been shown to be positively related to life satisfaction, psychological flexibility, and mental health (Howell &

Demuynck, 2021; Boland et al., 2021; Carvalho et al., 2021; Moran et al., 2018), constructs which are, in turn, positively related to meaning in life (Pan et al., 2008; Arslan & Allen, 2021; Arslan, Yıldırım, & Leung, 2021). Given the evidence for a multitude of indirect connections between self-as-context and meaning in life as well as the fact that self-as-context is related to both authenticity and coherence, the two constructs autobiographical reasoning was theorized to most directly affect (McAdams & Guo 2014), self-as-context was selected as a potential mediator between the experimental conditions and existential outcome measures.

Data analysis was performed using the Jamovi Version 2.2 package. The ability of selfas-context to mediate the relationship between the experimental condition and each of dependent variables at time 1 and 2 was tested using bootstrapping procedures. Three contrasts (2-1, 3-1, 2-3; 1=autobiographical reasoning, 2=memory reexperiencing, 3=control) were generated to compare each of the three experimental conditions. Unstandardized indirect effects were computed for each of 1000 bootstrapped samples, and the 95% confidence interval was computed by determining the indirect effects at the 2.5th and 97.5th percentiles. The full mediation data is reported in the tables on page 41, accompanied by figures of the significant mediated relationships. None of the 3-1 contrasts were significant and so are not included in this section.

The effect of experimental condition (2-1; b = .17, p = .032, 95% CI = .01/.33) and experimental condition (2-3; b = .24, p = .004, 95% CI = .08/.41) on meaninglessness at time 1 were fully mediated by self-as-context. The effect of experimental condition (2-1; b = .21, p = .039, 95% CI = .008/.31) and experimental condition (2-3; b = .30, p = .007, 95% CI = .06/.39) on meaninglessness at time 2 were also fully mediated by self-as-context. The effect of experimental condition (2-1; b = -.17, p = .033, 95%CI = -.32/-.01) and experimental condition (2-3; b = -.24, p = .004, 95%CI = -.40/-.08) on global meaning at time 1 were fully mediated by self-as-context. The effect of experimental condition (2-1; b = -.15, p =.038, 95%CI = -.29/-.01) and experimental condition (2-3; b = -.21, p = .006, 95%CI = -.36/-.06) on global meaning at time 2 were also fully mediated by self-as-context.

The effect of experimental condition (2-1; b = -.21, p = .029, 95% CI = -.40/-.02) and experimental condition (2-3; b = -.30, p = .003, 95% CI = -.50/-.10) on coherence at time 1 were fully mediated by self-as-context. The effect of experimental condition (2-1; b = -.20, p = .031, 95% CI = -.38/-.02) and experimental condition (2-3; b = -.28, p = .003, 95% CI = -.47/-.09) on coherence at time 2 were also fully mediated by self-as-context.

The effect of experimental condition (2-1; b = -.15, p = .038, 95% CI = -.29/-.01) and experimental condition (2-3; b = -.21, p = .006, 95% CI = -.36/-.06) on purpose at time 1 were fully mediated by self-as-context. The effect of experimental condition (2-1; (b = -.15, p = .037, 95% CI = -.29/-.01) and experimental condition (2-3; b = -.22, p = .006, 95% CI = -.37/-.06) on purpose at time 2 were also fully mediated by self-as-context.

The effect of experimental condition (2-1; b = -.18, p = .039, 95% CI = -.35/-.01) and experimental condition (2-3; b = -.25, p = .007, 95% CI = -.44/-.07) on cosmic mattering at time 1 were fully mediated by self-as-context. The effect of experimental condition (2-1; b = -.18, p = .040, 95% CI = -.35/-.01) and experimental condition (2-3; b = -.25, p = .007, 95% CI = -.44/-.07) on cosmic mattering at time 2 were also fully mediated by self-as-context.

The effect of experimental condition (2-1; b = -.14, p = .031, 95%CI = -.27/-.13) and experimental condition (2-3; b = -.20, p = .004, 95%CI = -.34/-.07) on positive affect at time 1 were fully mediated by self-as-context. The effect of experimental condition (2-1; b = -.13, p = .036, 95% CI = -.25/-.01) and experimental condition (2-3; b = -.18, p = .005, 95% CI = -.31/-./05) on positive affect at time 2 were also fully mediated by self-as-context.

The effect of experimental condition (2-1; b = .10, p = .035, 95%CI = .01/.19) and experimental condition (2-3; b = .14, p = .005, 95%CI = .04/.24) on negative affect at time 1 were fully mediated by self-as-context. The effect of experimental condition (2-1; b = .09, p = .041, 95%CI = .004/.17) and experimental condition (2-3; b = .13, p = .008, 95%CI = .03/.22) on negative affect at time 2 were also fully mediated by self-as-context.

The effect of experimental condition (2-1; b = -.13, p = .033, 95%CI = -.25/-.01) and experimental condition (2-3; b = -.18, p = .004, 95%CI = -.31/-.06) on life satisfaction at time 1 were fully mediated by self-as-context. The effect of experimental condition (2-1; b = -.13, p =.036, 95%CI = -.24/-.01) and experimental condition (2-3; b = -.18, p = .005, 95%CI = -.30/-.05) on life satisfaction at time 2 were also fully mediated by self-as-context.

The effect of experimental condition (2-1; b = .09, p = .045, 95%CI = .002/.17) and experimental condition (2-3; b = .13, p = .01, 95%CI = .03//.22) on experiential avoidance at time 1 were fully mediated by self-as-context. The effect of experimental condition (2-1; b = .09, p = .048, 95%CI = <.001/.18) and experimental condition (2-3; b = .14, p = .012, 95%CI = .03/.24) on experiential avoidance at time 2 were also fully mediated by self-as-context.

The effect of experimental condition (2-1; b = -.12, p = .033, 95%CI = -.23/-.01) and experimental condition (2-3; b = -.17, p = .004, 95%CI = -.29/-.05) on authenticity at time 1 were fully mediated by self-as-context. The effect of experimental condition (2-1; b = -.11, p = .040, 95%CI = -.23/-.01) and experimental condition (2-3; b = -.07, p = .006, 95%CI = -.29/-.05) on authenticity at time 2 were also fully mediated by self-as-context. The effect of experimental condition (2-1; b = .21, p = .032, 95% CI = .02/.40) and experimental condition (2-3; b = .30, p = .004, 95% CI = .10/.50) on alienation at time 1 were fully mediated by self-as-context. The effect of experimental condition (2-1; b = .23, p = .032, 95% CI = .02/.44) and experimental condition (2-3; b = .26, p = .004, 95% CI = .01/.54) on alienation at time 2 were also fully mediated by self-as-context.

The effect of experimental condition (2-1; b = .21, p = .050, 95%CI = <.001/.26) and experimental condition (2-3; b = .30, p = .013, 95%CI = .04/.34) on openness to external influence at time 1 were fully mediated by self-as-context. The indirect effect of experimental condition (2-1) and experimental condition (2-3) on openness to external influence at time 2 was not significant.

The effect of experimental condition (2-3; b = -.17, p = .016, 95%CI = -.30/-.03) on intentions to help others was fully mediated by self-as-context. The indirect effect of experimental condition (2-1) on intentions to help others was not significant. Intentions to help others was only measured at time 2.

The effect of experimental condition (2-3; b = -.09, p = .03, 95%CI = -.17/-.01) on prosociality was fully mediated by self-as-context. The indirect effect of experimental condition (2-1) on prosociality was not significant. Prosociality was only measured at time 2.

The effect of experimental condition (2-1; b = -2.23, p = .040, 95%CI = -4.35/-.11) and experimental condition (2-3; b = -3.17, p = .010, 95%CI = -5.49/-.86) on alienation were fully mediated by self-as-context. Total values was only measured at time 2.

#### Discussion

In spite of their similar roots and branches, there has been little research integrating the fields of narrative and existential psychology. This experiment took a step towards integration by analyzing the effects of a life review intervention on a number of existential outcome measures. In addition, it aimed to resolve a dilemma within the field of narrative psychology by attempting to isolate the mechanism—autobiographical reasoning or memory reexperiencing—through which life review leads to psychological benefits. I expected participants in the autobiographical reasoning condition to experience better existential effects than the other two conditions but for memory reexperiencing to still lead to more psychological benefits than the control.

The predicted pattern of effects of life review to coherence and authenticity to purpose to mattering to meaning did not emerge. Although coherence and mattering were significantly higher in autobiographical reasoning than memory reexperiencing in the direct MANOVA effects, participants in the control condition actually experienced better alienation, negative affect, and self-as-context than those in memory reexperiencing. There was little to distinguish between autobiographical reasoning and the control besides higher negative affect in the former. The indirect effects, with experimental condition mediated by self-as-context, revealed a clearer pattern of results—participants performed significantly better in both autobiographical reasoning and the control were still not significantly different. Furthermore, effects of life review decreased from time 1 to time 2 rather than increased, as hypothesized.

This pattern of results was not at all what was anticipated. Therefore, before drawing conclusions from them, I will examine potential explanations. It seems to me there are five

options: One is that something about the control condition caused it to, unexpectedly, promote the experience of meaning more than the life review conditions. The second is that something about the life review conditions caused them to disrupt the experience of meaning more than the control. Each of these options gives rise to the same two options with regard to the autobiographical reasoning and memory reexperiencing condition. The fifth option is that the results are explained by some combination of the previous four options. To tease these options apart, I will first address the first set of options by discussing the two life review conditions versus the control before proceeding to examine autobiographical reasoning versus memory reexperiencing.

There are four primary differences between my experimental conditions and other studies of life review, any or all of which may have influenced the results. First, whereas the majority of studies on life review use older adult (65+) participants, mine used young adult college students (Bohlmeijer et al., 2003; Pinquart & Forstmeier, 2012). Life review is theorized to be important to both older adults and young adults, but for different reasons (Erikson, 1950; McAdams & Guo, 2014). In young adults, life review is thought to promote identify formation; in older adults, it is thought to help prevent despair (Erikson, 1950; McAdams & Guo, 2014). Older adults have generally spent a great deal of time thinking back on their life they and interpretating it (Carstensen, Isaacowitz, & Charles, 1999). According to the narrative therapeutic paradigm, they have solid identities woven from a lifetime's worth of experiences and meanings made from them (Payne, 2011). Therefore, they already have all of the internal resources they need to pull themselves out of depression; they simply need to be guided through the process of integrative reminiscence to recall and reconnect their previously formed narratives and meanings to their current identities and circumstances (Payne, 2011). If this theory is correct, it would stand to

reason that the benefits of life review would show up fairly quickly for this population. Young adults, on the other hand, may have been too focused on preparation for the future to have thought a great deal about how their past events have led them to where, and who, they currently are (Carstensen, Isaacowitz, & Charles, 1999). Their identities are not yet storied, and their meanings are still to be discovered; this is the process life review is theorized to help them with (McAdams & Guo, 2014). If life review is successful in assisting in identity formation, it would make sense for those benefits to show up further downstream. One week may have been too short a timespan to detect the most important benefits of life review on young adults.

The second major difference between the current study and most life review studies is the length of the intervention. My study's single half-hour intervention was extremely brief relative to the more typical 5-8 1.5-2-hour intervention (Bohlmeijer et al., 2003; Pinquart & Forstmeier, 2012). I had hoped to counteract this expected limitation by using a larger than average sample size. Nevertheless, it is still very likely this study's participants did not participate in enough life review to experience its full benefits. Moreover, this limitation may have been compounded by the already comparatively longer timeframe life review may take to work on young adults compared to older adults.

Third, another reason my participants may not have received the full benefits of life review is the inexperience of my study's interviewers. The interviewers for this study were undergraduates who had only approximately 20 hours of training to master three different interview paradigms before they began running participants. In most life review studies, interviews are conducted by people with at least a master's level training in clinical or counseling psychology and usually only include only one or two interview paradigms (Bohlmeijer et al., 2003; Pinquart & Forstmeier, 2012). Professionally trained practitioners are

likely able to more skillfully guide participants through the life review process, which could have increased its psychological benefits above the control.

Finally, and possibly most important, this study's control condition had a much finer contrast with the experimental conditions than the majority of other life review studies (Fry [1983], with its simple reminiscence control being a notable exception). Other life review studies have used either a waiting list control or interviewed participants about a non-autobiographical subject (e.g. favorite subjects in history), whereas this study asked participants to describe their previous day in minute detail (Bohlmeijer et al., 2003; Pinquart & Forstmeier, 2012). This study's control, therefore, was an autobiographical review, just not a life review. This closeness was intentional in an effort to isolate the mechanisms that make life review effective. The idea that the autobiographical control this study used would provide a useful contrast was supported by the meta-analyses demonstrating that life review tends to be significantly more effective than simple reminiscence, an even closer contrast than the one used in this study wherein participants can talk about any memories they choose (Bohlmeijer et al., 2003; Pinquart & Forstmeier, 2012). One possibility that represents an oversight in my design, is that being questioned about the mundane details of their previous day, as opposed to memories the participant is at least interested in, by an interested stranger may have caused a boost in participants' feelings of interpersonal importance, which has been shown to increase people's feelings of existential mattering (Guthrie et al., unpublished manuscript). The participants' ability to ramble unrestrained and without interruptions during the control condition compared to the more obvious and tightly constrained agenda of the life review conditions may have added to this effect. It is plausible this hypothetical boost to mattering also increased the other closely linked meaning-related outcome measures (Costin & Vignoles, 2019). Such an increase in mattering,

however, may have been short-lived compared to the more sustained existential benefits shown to result from deeper engagement in integrative reminiscence (Bohlmeijer et al., 2003; Pinquart & Forstmeier, 2012). Therefore, had it had the more extensive interventions with more experienced interviewers of the other life review studies included in the aforementioned metaanalyses. this study's results may have closely resembled their results, even without altering the control. Examining each of these four differences between the present study and other life review studies reveals a number of possible reasons this study did not demonstrate the expected pattern of psychological benefits. It is very likely a combination of these four factors contributed.

Having discussed potential explanations for the differences between the control and life review conditions, we can now turn to the equally interesting issue of what could account for the differences between the two life review conditions. First, it is worth restating that the differences between the two experimental conditions are, by themselves, in line with the hypotheses: Autobiographical reasoning, particularly in the mediational results, outperformed memory reexperiencing. The difficulty is coming up with an explanation for why autobiographical reasoning led to better results than memory reexperiencing while also not being significantly different than the control on the existential outcome measures. To do so, I will first take a closer look at the memory reexperiencing studies than the introduction afforded.

Fry (1983) argues negative life events are more adverse for older adults than younger ones, causing more intrusive thoughts and avoidant behaviors. Therefore, a reexperiencing approach to life review should counteract avoidant tendencies by forcing people to focus on the experiential details of their recollected life events. The structure of my reexperiencing condition and Fry's (1983) were very similar. They both involved reviewing five important life events in experiential detail. However, my experiment, unlike Fry's (1983), included a measure of

experiential avoidance to test the idea that reexperiencing causes less experiential avoidance and found that the reexperiencing condition, when mediated by self-as-context, actually led participants to become more avoidant rather than less. What differences between our experiments could have caused these opposite results? In addition to the demographic and interviewer factors already discussed, my reexperiencing condition attempted to prevent autobiographical reasoning. In order to maintain the integrity between the two life review conditions, when participants started to spontaneously engage in autobiographical reasoning, an occurrence that was not infrequent, interviewers gently guided them back to experiential reexperiencing. Since Fry (1983) did not prevent participants from autobiographically reasoning, if autobiographical reasoning tends to occur naturally in the reminiscence process, it is plausible that the psychological benefits Fry observed were not due to reexperiencing at all but, instead, to autobiographical reasoning.

The story with Serrano et al. (2004) is similar. Their theoretical rationale was that depression is correlated with a lack of autobiographical specificity; therefore, getting participants to reexperience their memories in vivid detail should improve depression. At the end of their interventions, they found that larger increases in the capacity for memory specificity were associated with improved affect and life satisfaction (Serrano et al., 2004). Checking the extent to which my reexperiencing condition was successful in increasing autobiographical specificity will require a qualitative examination of the interview records. It is possible that my control condition increased autobiographical specificity more than the reexperiencing condition, which could account for some of the psychological benefits participants in that condition experienced. However, that possibility would not explain the fact that my reexperiencing conditions or the

fact that life satisfaction, when mediated by self-as-context, was lower in the reexperiencing than reasoning condition. In addition to not preventing or controlling for autobiographical reasoning, both Serrano et al. (2004) and Fry (1983) had multiple interventions over a series of weeks, leaving time for autobiographical reasoning to occur and for its positive effects to accrue between sessions. Therefore, it seems more probable that autobiographical reasoning may have accounted for the improvements in affect and life satisfaction in Serrano et al.'s (2004) study and that the lack of it in my reexperiencing condition is what caused it to underperform.

Both of the studies that claimed to provide evidence that memory reexperiencing is the primary mechanism behind the benefits of life review failed to demonstrate that reexperiencing works in the absence of autobiographical reasoning (Serrano et al., 2004; Fry, 1983). My study, which controlled for autobiographical reasoning, found that memory reexperiencing, less autobiographical reasoning, not only did not cause the expected psychological benefits but may have decreased the experience of meaning and de-elevated mood, a suggestion supported by the fact that negative affect was higher in both life review conditions and highest in reexperiencing. It is still possible that the control and autobiographical reasoning conditions boosted mood and meaningfulness and that reexperiencing participants remained at baseline, but this does not seem as likely as the former option. After all, both life review conditions included the retelling of a "rock bottom" experience and, potentially, three other negative major life events, which is likely to account for the increased negative affect in these conditions. Negative affect did not, however, moderate or mediate the other variables, which seems to indicate that the existential outcome measures were lower in the reexperiencing condition due to a direct destabilization of meaningmaking processes. Since the existential outcome measures were not higher in autobiographical reasoning than the control, one possibility is that the recounting of negative life events would

have destabilized meaning-making in both conditions but that autobiographical reasoning either prevented or offset this destabilization. Examining the role of self-as-context in the experiment may explain why.

Self-as-context, as measured by the Self-as-Context Scale (Zettle et al. 2018), is one's ability to identify with a transcendent, observing "I" that is present and immutable throughout the course of one's life and is unaffected by one's changing thoughts, feelings, and circumstances. Empirical research on self-as-context is very recent, with the first measure of it published in 2018 (Zettle et al.). Therefore, I am aware of no research on the links between autobiographical reasoning and self-as-context prior to this experiment. However, it makes intuitive sense that engaging in autobiographical reasoning in life review could bring people closer to the perspective of self-as-context. The aim of autobiographical reasoning was to have the participants take the perspective of five different past selves and reintegrated those past selves into who they are today. When successful, participants would have viewed how they had changed over the course of their lives and seen that, in spite of those changes, they were single, consistent selves to which the lives they were reviewing had happened, a perspective remarkably similar to self-as-context. There is an irony here, as McAdams' "narrative self" is a form of selfas-content (Farb et al., 2007; McAdams, 1994). Self-as-content is the opposite of self-as-context; it involves viewing oneself as an agglomeration of facts and stories (Dahl, 2010). Nevertheless, it may be that, even though autobiographical reasoning aids people in constructing a narrative selfas-content, the process of autobiographical reasoning may bring people more in alignment with self-as-context. Self-as-context, therefore, may be the bulwark that prevented as much disruption of meaning-making processes in autobiographical reasoning, a possibility that makes more theoretical sense after examining the role cognitive fusion may have played in this experiment.

Cognitive fusion is an overidentification with self-as-content (Dahl, 2010). When someone is fused, they become stuck to certain stories about who they are and lose the psychological flexibility necessary to adapt to shifting circumstances, which has been shown to mediate the experience of meaning in life (Arslan & Allen, 2021). It seems possible that memory reexperiencing, in which participants focused intensely on narrative and experiential details of what happened to them at different points in their life, without using autobiographical reasoning to connect those experiences to an enduring and evolving singular self, may have promoted cognitive fusion with the content on those experiences, with participants coming to feel they are no more than their autobiographical "facts." Since cognitive fusion indirectly reduces meaning in life and self-as-context is theorized to indirectly increase it by directly promoting psychological flexibility, this could explain why memory reexperiencing led to significantly worse existential outcomes than both autobiographical reasoning and the control when mediated by self-as-context (Arslan & Allen, 2021; Dahl, 2010). Of course, these very interesting relationships between autobiographical reasoning and self-as-context are still hypothetical and require significant further investigation. Even still, the mediation results indicate, at the very least, that reexperiencing is, in and of itself, insufficient to create the positive effects associated with life review.

Taken as a whole, this experiment shows decent evidence for the effect of autobiographical reasoning versus memory reexperiencing in life review on existential outcomes in young adults but poor evidence for the effectiveness of life review. Without showing stronger evidence for its psychological benefits, it is difficult to know how to contextualize this study within the larger life review literature. It is, therefore, crucial that additional research be

conducted to address the limitations of this experiment, provide more definite explanations of its results, and explore the many new directions it indicated.

#### Limitations

In addition to the limitations already discussed—the brevity of the intervention, the inexperience of the interviewers, and the close contrast between the conditions—an important limitation of this experiment, at its current stage, is that there were no quantitative manipulation checks. Therefore, I do not yet know the extent to which the autobiographical reasoning and memory reexperiencing conditions succeeded in inducing their titular processes in the participants. This information is contained in the qualitative interview data, all of which has not yet been processed. Once it has been fully processed, answers to questions like, "Did the control actually increase reexperiencing more than the other conditions?" will be answered, and examining the extent to which each condition promoted reasoning and reexperiencing within individual participants may clarify the pattern of results.

An alternative explanation for why participants in the reexperiencing condition experienced worse outcomes is that, in order to prevent autobiographical reasoning, the interviewers were required to interrupt the participants more than the other two conditions. Depending on the extent of these interruptions, it is possible they could account for disruptions in meaning-making in this condition. Addressing this limitation will require counting the number of interruptions in each interview across conditions and assessing the extent to which the interruptions were experienced as intrusive or disruptive, a task I am in the process of performing. A final limitation of this experiment was that all of the outcome data came from self-report survey measures, which can be both overly simplistic and prone to participant bias. *Future Directions* 

The first future direction is to code and analyze the large amount of qualitative data generated in this study. Areas of particular interest are the vividness, valence, number of interruptions, extent of autobiographical reasoning, and engagement in the main interview as well as the goal confidence and clarity, motivational themes (e.g. agency, communion, generativity), coherence, and complexity in the future goals interview. Vividness and autobiographical reasoning will serve as manipulation checks that, once accounted for, may clarify the pattern of quantitative results. Interruptions, valence, and engagement are factors that, once controlled for, may alter the pattern of quantitative results.

The future goals interview was an outcome measure for this experiment that has not yet been analyzed. It is possible that the richer qualitative outcome data may reveal results that the simplicity of the quantitative self-report data could not capture. For example, if autobiographical reasoning led participants to more deeply understand themselves, it is possible this effect may appear in the confidence and clarity of their future goals as well as in the coherence and complexity of their projected life stories. Alternatively, it may be that greater experiential processing in either the memory reexperiencing or control conditions could lead participants to better envision their future goals. Additionally, exploring whether the interventions affected participants' motivation themes and the relationships between the motivational themes present in the future goals interview and the quantitative outcome measures (e.g. Does qualitative agency correlate with quantitative purpose? Does goal confidence and clarity relate to coherence?) will be very interesting.

A second future direction may be to try to replicate this experiment with written interview questions, thereby eliminating interruptions and other interviewer effects. Such an undertaking could not only solidify this experiment's tentative findings but shed light on many of

its unexpected findings such as the role of self-as-context. In addition, if the life review intervention succeeded in causing psychological benefits even in the absence of a "proxy therapist," it would bolster empirical support for the benefits of life review, generally, and with young adults, particularly.

Less specifically, there is a great deal more that can be done to explore relationships between narrative and existential ideas. The connections between self-as-context, life review, and existential psychology exposed in this experiment may be particularly fruitful avenues for follow-up endeavors. If autobiographical reasoning really does promote self-as-context, and even more so if self-as-context promotes meaning-making in turn, that would reveal many new directions for research related to contextual cognitive behavioral therapies like Acceptance and Commitment Therapy, in which the concept of self-as-context already plays a prominent part.

## Conclusion

In spite of its limitations and the twists in its anticipated plot, this experiment provides some tentative evidence that autobiographical reasoning is more central to life review's successes than memory reexperiencing in young adults and represents a step towards integrating narrative and existential psychological pursuits. Exploration of this study's qualitative data, and perhaps the collection of more data, is necessary to be more confident in the interpretations put forward to explain the pattern of results found in this experiment. Nevertheless, the possible connections between autobiographical reasoning, self-as-context, and meaning in life authenticity are exciting. The potential for sequels is substantial.
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Key for the Appendix Tables:

Legend						
Abbreviation	Variable					
Crisis	Meaninglessness Time 1					
Crisis 2	Meaninglessness Time 2					
 GM	Global Meaning Time 1					
GM_2	Global Meaning Time 1					
Comp	Coherence Time 1					
Comp_2	Coherence Time 1					
Purp	Purpose Time 1					
Purp_2	Purpose Time 1					
Matter	Mattering Time 1					
Matter_2	Mattering Time 1					
PA	Positive Affect Time 1					
PA_2	Positive Affect Time 1					
NA	Negative Affect Time 1					
NA_2	Negative Affect Time 1					
SWLS	Life Satisfaction Time 1					
SWLS_2	Life Satisfaction Time 1					
BEAQ	Experiential Avoidance Time 1					
BEAQ_2	Experiential Avoidance Time 1					
WAauth	Authenticity Time 1					
WAauth_2	Authenticity Time 1					
WAalien	Alienation Time 1					
WAalien_2	Alienation Time 1					
WAinf	Openness to External Influence Time 1					
WAinf_2	Openness to External Influence Time 1					
SAC	Self-as-Context Time 2					
SAC_2	Self-as-Context Time 2					
Prosocial_2	Prosociality					
Help_2	Intentions to Help Others					
VLQTotal_2	Total Values					

Ta	ble	1.

Descriptive Statistics										
	N	Range	Minimum	Maximum	Mean	SE	SD			
Meaninglessness	212	4.20	1.00	5.20	1.69	0.07	1.01			
Meaninglessness_2	212	6.00	1.00	7.00	1.92	0.09	1.25			
Global Meaning	212	5.50	1.50	7.00	6.04	0.07	1.02			
Global Meaning_2	212	6.00	1.00	7.00	5.89	0.08	1.10			
Coherence	212	4.50	2.50	7.00	5.26	0.07	1.02			
Coherence_2	212	4.50	2.50	7.00	5.27	0.07	1.08			
Purp	212	5.50	1.50	7.00	5.84	0.08	1.11			
Purp_2	212	5.50	1.50	7.00	5.71	0.08	1.10			
Matter	212	6.00	1.00	7.00	5.38	0.10	1.40			
Matter_2	212	6.00	1.00	7.00	5.38	0.10	1.43			
РА	212	3.70	1.20	4.90	3.07	0.06	0.80			
PA_2	212	4.00	1.00	5.00	2.84	0.06	0.90			
NA	212	2.90	1.00	3.90	1.83	0.05	0.67			
NA_2	212	4.00	1.00	5.00	1.95	0.05	0.75			
SWLS	212	3.20	1.80	5.00	3.71	0.05	0.80			
SWLS_2	212	4.00	1.00	5.00	3.76	0.06	0.88			
BEAQ	212	3.93	1.73	5.67	3.63	0.05	0.79			
BEAQ_2	212	4.47	1.27	5.73	3.63	0.06	0.90			
WAauth	212	3.75	3.25	7.00	5.94	0.05	0.72			
WAauth_2	212	6.00	1.00	7.00	5.84	0.06	0.85			
WAalien	212	4.75	1.00	5.75	2.84	0.08	1.23			
WAalien_2	212	5.75	1.00	6.75	2.87	0.09	1.35			
WAinf	212	5.75	1.00	6.75	4.02	0.09	1.32			
WAinf_2	212	5.75	1.00	6.75	4.08	0.09	1.31			
SAC	212	4.00	3.00	7.00	5.31	0.05	0.78			
SAC_2	211	6.00	1.00	7.00	5.30	0.06	0.94			
Prosocial_2	212	6.00	1.00	7.00	5.56	0.06	0.89			
Help_2	212	8.00	1.00	9.00	7.56	0.09	1.25			
VLQTotal_2	212	99.00	1.00	100.00	54.90	1.21	17.66			

## Table 2.

Between-Subjects Factors						
		Ν				
ExpGRP	1	73				

2	71
3	66

Tests of Between-Subjects Effects											
Transformed Variab	Transformed Variable:										
Source		Type III Sum of Squares	df	Mean Square	F	р	Partial Eta Squared				
Intercept	Crisis	200.56	1.00	200.56	99.78	0.000	0.327				
	GM	1211.13	1.00	1211.13	667.45	0.000	0.765				
	Comp	1003.87	1.00	1003.87	582.71	0.000	0.740				
	Purp	1025.02	1.00	1025.02	560.32	0.000	0.732				
	Matter	930.23	1.00	930.23	273.62	0.000	0.572				
	РА	299.29	1.00	299.29	251.93	0.000	0.551				
	NA	126.89	1.00	126.89	162.34	0.000	0.442				
	WAauth	1230.58	1.00	1230.58	1315.81	0.000	0.865				
	WAinf	734.09	1.00	734.09	250.10	0.000	0.550				
	WAalien	350.56	1.00	350.56	125.11	0.000	0.379				
	SWLS	545.66	1.00	545.66	473.88	0.000	0.698				
	BEAQ	530.65	1.00	530.65	426.16	0.000	0.675				
	SAC	1051.42	1.00	1051.42	927.64	0.000	0.819				
ExpGRP	Crisis	6.50	2.00	3.25	1.62	0.201	0.016				
	GM	7.39	2.00	3.69	2.04	0.133	0.019				
	Comp	7.94	2.00	3.97	2.30	0.102	0.022				
	Purp	0.37	2.00	0.18	0.10	0.905	0.001				
	Matter	28.45	2.00	14.23	4.18	0.017	0.039				
	РА	4.46	2.00	2.23	1.88	0.156	0.018				
	NA	8.70	2.00	4.35	5.57	0.004	0.052				
	WAauth	1.82	2.00	0.91	0.97	0.381	0.009				
	WAinf	9.06	2.00	4.53	1.54	0.216	0.015				
	WAalien	18.21	2.00	9.10	3.25	0.041	0.031				
	SWLS	3.03	2.00	1.52	1.32	0.270	0.013				
	BEAQ	1.39	2.00	0.70	0.56	0.573	0.005				
	SAC	9.65	2.00	4.83	4.26	0.015	0.040				
Error	Crisis	412.04	205.00	2.01							
	GM	371.99	205.00	1.81							
	Comp	353.17	205.00	1.72							
	Purp	375.02	205.00	1.83							

Matter	696.95	205.00	3.40	
PAset	243.53	205.00	1.19	
NASet	160.24	205.00	0.78	
WAauth	191.72	205.00	0.94	
\\/\inf	601 70	205.00	2.04	
WAIIII	601.70	205.00	2.94	
WAalien	574.41	205.00	2.80	
SWLS	236.05	205.00	1.15	
BEAQ	255.26	205.00	1.25	
SAC	232.35	205.00	1.13	

		Estimatated Marginal Mea	ins			
				95% Cor	nfidence	
				Interval		
Measure		Mean	SD	Lower	Upper	
Crisis	1	1.72	0.12	1.49	1.96	
	2	1.97	0.12	1.73	2.20	
	3	1.69	0.12	1.44	1.93	
GM	1	6.07	0.11	5.85	6.29	
	2	5.78	0.11	5.56	6.01	
	3	6.06	0.12	5.83	6.30	
Comp	1	5.40	0.11	5.19	5.62	
	2	5.09	0.11	4.87	5.31	
	3	5.35	0.11	5.12	5.57	
Purp	1	5.82	0.11	5.60	6.05	
	2	5.75	0.11	5.53	5.98	
	3	5.78	0.12	5.54	6.01	
Matter	1	5.68	0.15	5.37	5.98	
	2	5.06	0.15	4.75	5.36	
	3	5.45	0.16	5.14	5.77	
PA	1	3.05	0.09	2.87	3.23	
	2	2.82	0.09	2.64	3.00	
	3	3.02	0.10	2.83	3.21	
NA	1	1.94	0.07	1.80	2.09	
	2	2.02	0.07	1.87	2.17	
	3	1.68	0.08	1.52	1.83	
WAaut	1	5.92	0.08	5.76	6.07	
	2	5.79	0.08	5.63	5.95	
	3	5.95	0.08	5.78	6.11	
WAinf	1	3.92	0.14	3.64	4.20	

	2	4.26	0.14	3.97	4.54
	3	3.99	0.15	3.69	4.28
WAalien	1	2.80	0.14	2.53	3.07
	2	3.11	0.14	2.84	3.39
	3	2.60	0.15	2.31	2.89
SWLS	1	3.86	0.09	3.68	4.04
	2	3.67	0.09	3.50	3.85
	3	3.69	0.09	3.50	3.87
BEAQ	1	3.55	0.09	3.37	3.73
	2	3.55	0.09	3.50	3.87
	3	3.55	0.10	3.46	3.85
SAC	1	3.55	0.09	5.17	5.52
	2	3.55	0.09	4.93	5.29
	3	3.55	0.09	5.30	5.66

Multiple Comparisons								
			Mean			95% Cor Interval for	nfidence Difference <sup>b</sup>	
Measure			Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound	
Crisis	1	2	-0.24	0.17	0.144	-0.57	0.08	
		3	0.04	0.17	0.837	-0.30	0.37	
	2	1	0.24	0.17	0.144	-0.08	0.57	
		3	0.28	0.17	0.105	-0.06	0.62	
	3	1	-0.04	0.17	0.837	-0.37	0.30	
		2	-0.28	0.17	0.105	-0.62	0.06	
GM	1	2	0.28	0.16	0.077	-0.03	0.60	
		3	0.00	0.16	0.981	-0.32	0.33	
	2	1	-0.28	0.16	0.077	-0.60	0.03	
		3	-0.28	0.16	0.091	-0.60	0.04	
	3	1	0.00	0.16	0.981	-0.33	0.32	
		2	0.28	0.16	0.091	-0.04	0.60	
Comp	1	2	0.31	0.15	0.044	0.01	0.62	
		3	0.06	0.16	0.723	-0.26	0.37	
	2	1	-0.31	0.15	0.044	-0.62	-0.01	
		3	-0.26	0.16	0.109	-0.57	0.06	
	3	1	-0.06	0.16	0.723	-0.37	0.26	
		2	0.26	0.16	0.109	-0.06	0.57	
Purp	1	2	0.07	0.16	0.660	-0.24	0.38	
		3	0.05	0.16	0.781	-0.28	0.37	
	2	1	-0.07	0.16	0.660	-0.38	0.24	

		3	-0.02	0.16	0.881	-0.35	0.30
	3	1	-0.05	0.16	0.781	-0.37	0.28
		2	0.02	0.16	0.881	-0.30	0.35
Matter	1	2	0.62	0.22	0.005	0.19	1.05
		3	0.22	0.22	0.320	-0.22	0.66
	2	1	-0.62	0.22	0.005	-1.05	-0.19
		3	-0.40	0.22	0.077	-0.84	0.04
	3	1	-0.22	0.22	0.320	-0.66	0.22
		2	0.40	0.22	0.077	-0.04	0.84
РА	1	2	0.23	0.13	0.075	-0.02	0.48
		3	0.03	0.13	0.830	-0.23	0.29
	2	1	-0.23	0.13	0.075	-0.48	0.02
		3	-0.20	0.13	0.130	-0.46	0.06
	3	1	-0.03	0.13	0.830	-0.29	0.23
		2	0.20	0.13	0.130	-0.06	0.46
NA	1	2	-0.08	0.10	0.445	-0.29	0.13
		3	0.27	0.11	0.014	0.05	0.48
	2	1	0.08	0.10	0.445	-0.13	0.29
		3	0.35	0.11	0.002	0.13	0.56
	3	1	-0.27	0.11	0.014	-0.48	-0.05
		2	-0.35	0.11	0.002	-0.56	-0.13
WAauth	1	2	0.12	0.11	0.287	-0.10	0.35
		3	-0.03	0.12	0.791	-0.26	0.20
	2	1	-0.12	0.11	0.287	-0.35	0.10
		3	-0.15	0.12	0.194	-0.38	0.08
	3	1	0.03	0.12	0.791	-0.20	0.26
		2	0.15	0.12	0.194	-0.08	0.38
WAinf	1	2	-0.34	0.20	0.098	-0.73	0.06
		3	-0.07	0.21	0.754	-0.47	0.34
	2	1	0.34	0.20	0.098	-0.06	0.73
		3	0.27	0.21	0.194	-0.14	0.68
	3	1	0.07	0.21	0.754	-0.34	0.47
		2	-0.27	0.21	0.194	-0.68	0.14
WAalien	1	2	-0.31	0.20	0.114	-0.70	0.08
		3	0.20	0.20	0.329	-0.20	0.60
	2	1	0.31	0.20	0.114	-0.08	0.70
		3	0.51	0.20	0.013	0.11	0.91
	3	1	-0.20	0.20	0.329	-0.60	0.20
		2	-0.51	0.20	0.013	-0.91	-0.11
SWLS	1	2	0.19	0.13	0.145	-0.06	0.43
		3	0.17	0.13	0.188	-0.08	0.43
	2	1	-0.19	0.13	0.145	-0.43	0.06
		3	-0.01	0.13	0.919	-0.27	0.24

	3	1	-0.17	0.13	0.188	-0.43	0.08
		2	0.01	0.13	0.919	-0.24	0.27
BEAQ	1	2	-0.13	0.13	0.311	-0.39	0.13
		3	-0.10	0.14	0.457	-0.37	0.17
	2	1	0.13	0.13	0.311	-0.13	0.39
		3	0.03	0.14	0.808	-0.23	0.30
	3	1	0.10	0.14	0.457	-0.17	0.37
		2	-0.03	0.14	0.808	-0.30	0.23
SAC	1	2	0.24	0.13	0.062	-0.01	0.48
		3	-0.14	0.13	0.294	-0.39	0.12
	2	1	-0.24	0.13	0.062	-0.48	0.01
		3	-0.37	0.13	0.005	-0.63	-0.12
	3	1	0.14	0.13	0.294	-0.12	0.39
		2	0.37	0.13	0.005	0.12	0.63

## Table 3.

Indirect and Total Effects - Meaninglessness

				95% C	.I. (a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow$ $SAC \Rightarrow Crisis$	0.17	0.08	0.01	0.33	0.08	2.14	0.032
	$ExpGRP2 \Rightarrow$ $SAC \Rightarrow Crisis$	-0.07	0.08	-0.23	0.08	-0.03	-0.93	0.351
	ExpGRP3 ⇒ SAC ⇒ Crisis	0.24	0.08	0.08	0.41	0.10	2.89	0.004
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	SAC $\Rightarrow$ Crisis	-0.60	0.08	-0.76	-0.44	-0.47	-7.51	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ Crisis	0.04	0.15	-0.25	0.34	0.02	0.27	0.784
	ExpGRP2 ⇒ Crisis	0.05	0.15	-0.24	0.35	0.02	0.34	0.734
	ExpGRP3 ⇒ Crisis	-0.01	0.15	-0.31	0.29	< -0.01	-0.06	0.948
Total	ExpGRP1 ⇒ Crisis	0.21	0.17	-0.12	0.54	0.10	1.27	0.205
	ExpGRP2 ⇒ Crisis	-0.02	0.17	-0.35	0.31	-0.01	-0.13	0.899
	ExpGRP3 ⇒ Crisis	0.23	0.17	-0.10	0.57	0.09	1.37	0.17

Note. Confidence intervals computed with method: Standard (Delta method) Note. Betas are completely standardized effect sizes Note. ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 1.



\* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

Figure 2.



Table 4.

Indirect and Total Effects – Meaninglessness Time 2

				95% C	.I. (a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow SAC \Rightarrow Crisis_2$	0.16	0.08	0.01	0.31	0.06	2.06	0.039
	ExpGRP2 ⇒ SAC ⇒ Crisis_2	-0.07	0.07	-0.21	0.08	-0.03	-0.93	0.354
	ExpGRP3 ⇒ SAC ⇒ Crisis_2	0.23	0.08	0.06	0.39	0.07	2.70	0.007
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	SAC ⇒ Crisis_2	-0.56	0.10	-0.77	-0.35	-0.35	-5.34	<.001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ Crisis_2	0.10	0.20	-0.28	0.49	0.04	0.51	0.607
	ExpGRP2 ⇒ Crisis_2	0.08	0.20	-0.30	0.47	0.03	0.43	0.669
	ExpGRP3 ⇒ Crisis_2	0.02	0.20	-0.38	0.41	0.01	0.08	0.934
Total	ExpGRP1 ⇒ Crisis_2	0.26	0.21	-0.15	0.67	0.10	1.25	0.21
	ExpGRP2 ⇒ Crisis_2	0.02	0.21	-0.39	0.43	0.01	0.08	0.937
	ExpGRP3 ⇒ Crisis_2	0.24	0.21	-0.17	0.66	0.08	1.15	0.249

Note. Confidence intervals computed with method: Standard (Delta method)

*Note.* Betas are completely standardized effect sizes *Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 3.



\* p < .05, \*\* p < .01, \*\*\* p < .001

Figure 4.



\* p < .05, \*\* p < .01, \*\*\* p < .001

## Table 5.

Indirect and Total Effects - Global Meaning

				95% C	(a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow$ $SAC \Rightarrow GM$	-0.17	0.08	-0.32	-0.01	-0.08	-2.14	0.033
	$ExpGRP2 \Rightarrow$ $SAC \Rightarrow GM$	0.07	0.08	-0.08	0.22	0.03	0.93	0.351
	$ExpGRP3 \Rightarrow$ $SAC \Rightarrow GM$	-0.24	0.08	-0.40	-0.08	-0.09	-2.87	0.004
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	$SAC \Rightarrow GM$	0.59	0.08	0.43	0.75	0.45	7.24	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.40	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ GM	-0.17	0.15	-0.47	0.13	-0.08	-1.11	0.267
	ExpGRP2 ⇒ GM	-0.17	0.15	-0.47	0.12	-0.08	-1.15	0.251
	ExpGRP3 ⇒ GM	0.01	0.16	-0.30	0.31	< 0.01	0.04	0.97
Total	ExpGRP1 ⇒ GM	-0.34	0.17	-0.67	-0.01	-0.16	-2.00	0.046
	ExpGRP2 ⇒ GM	-0.10	0.17	-0.44	0.23	-0.05	-0.61	0.542
	ExpGRP3 ⇒ GM	-0.23	0.17	-0.57	0.10	-0.09	-1.36	0.175

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.



\* p < .05, \*\* p < .01, \*\*\* p < .001

Figure 6.



Table 6.

indifect and fotal Lifects - Global Meaning 2
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				95% C	.I. (a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow SAC \Rightarrow GM_2$	-0.15	0.07	-0.29	-0.01	-0.06	-2.08	0.038
	$ExpGRP2 \Rightarrow SAC \Rightarrow GM_2$	0.06	0.07	-0.07	0.19	0.03	0.93	0.354
	$ExpGRP3 \Rightarrow SAC \Rightarrow GM_2$	-0.21	0.08	-0.36	-0.06	-0.08	-2.74	0.006
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	$SAC \Rightarrow GM_2$	0.52	0.09	0.34	0.70	0.37	5.64	< .001

	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ GM_2	-0.09	0.17	-0.42	0.25	-0.04	-0.50	0.615
	ExpGRP2 ⇒ GM_2	-0.10	0.17	-0.44	0.24	-0.04	-0.59	0.557
	ExpGRP3 ⇒ GM_2	0.01	0.18	-0.33	0.36	0.01	0.08	0.933
Total	ExpGRP1 ⇒ GM_2	-0.23	0.18	-0.59	0.12	-0.10	-1.28	0.201
	ExpGRP2 ⇒ GM_2	-0.04	0.18	-0.40	0.32	-0.02	-0.21	0.834
	ExpGRP3 ⇒ GM_2	-0.19	0.19	-0.56	0.17	-0.07	-1.05	0.294

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 7.



\* p < .05, \*\* p < .01, \*\*\* p < .001

Figure 8.



Table 7.

Indirect and Total Effects – Coherence

				95% C	.I. (a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	ExpGRP1 ⇒ SAC ⇒ Comp	-0.21	0.10	-0.40	-0.02	-0.10	-2.18	0.029
	ExpGRP2 ⇒ SAC ⇒ Comp	0.09	0.10	-0.10	0.28	0.04	0.94	0.349
	ExpGRP3 ⇒ SAC ⇒ Comp	-0.30	0.10	-0.50	-0.10	-0.12	-2.98	0.003
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	$SAC \Rightarrow Comp$	0.74	0.08	0.59	0.89	0.57	9.80	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ Comp	-0.09	0.14	-0.37	0.18	-0.04	-0.66	0.513
	ExpGRP2 ⇒ Comp	-0.23	0.14	-0.51	0.05	-0.11	-1.62	0.105
	ExpGRP3 ⇒ Comp	0.14	0.15	-0.15	0.42	0.05	0.94	0.347
Total	ExpGRP1 ⇒ Comp	-0.30	0.17	-0.63	0.03	-0.14	-1.79	0.073
	ExpGRP2 ⇒ Comp	-0.14	0.17	-0.47	0.19	-0.06	-0.82	0.413
	ExpGRP3 ⇒ Comp	-0.16	0.17	-0.50	0.17	-0.06	-0.95	0.343

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.





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

Figure 10.



\* p < .05, \*\* p < .01, \*\*\* p < .001

Table 8.

				95% C	.I. (a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow$ $SAC \Rightarrow$ $Comp_2$ $Exp(SP2) \Rightarrow$	-0.20	0.09	-0.38	-0.02	-0.09	-2.16	0.031
	$SAC \Rightarrow$ $Comp_2$ $ExpGRP3 \Rightarrow$	0.08	0.09	-0.09	0.26	0.04	0.93	0.35
	SAC ⇒ Comp_2	-0.28	0.10	-0.47	-0.09	-0.11	-2.93	0.003
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	SAC $\Rightarrow$ Comp_2	0.69	0.08	0.53	0.86	0.50	8.31	< .001
	ExpGRP2 $\Rightarrow$	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 $\Rightarrow$ Comp_2	-0.11	0.16	-0.42	0.19	-0.05	-0.71	0.475
	$ExpGRP2 \Rightarrow Comp_2$	-0.18	0.16	-0.48	0.13	-0.08	-1.12	0.262
	ExpGRP3 $\Rightarrow$ Comp_2	0.06	0.16	-0.25	0.38	0.02	0.40	0.691
Total	ExpGRP1 ⇒ Comp_2	-0.31	0.18	-0.66	0.04	-0.14	-1.73	0.083
	ExpGRP2 ⇒ Comp_2	-0.09	0.18	-0.45	0.26	-0.04	-0.51	0.611
	ExpGRP3 ⇒ Comp 2	-0.22	0.18	-0.57	0.14	-0.08	-1.20	0.232

Indirect and Total Effects – Coherence 2

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.



\* p < .05, \*\* p < .01, \*\*\* p < .001

Figure 12.



Table 9.

Indirect and T	Total Effects - Purpose							
				95% C	C.I. (a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow SAC \Rightarrow$ $Purp$	-0.15	0.07	-0.29	-0.01	-0.06	-2.08	0.038
	$ExpGRP2 \Rightarrow SAC \Rightarrow$ $Purp$ $EvpGRP2 \Rightarrow SAC \Rightarrow$	0.06	0.07	-0.07	0.20	0.03	0.93	0.354
	$ExpGRP3 \Rightarrow SAC \Rightarrow$ $Purp$	-0.21	0.08	-0.36	-0.06	-0.08	-2.74	0.006
Component	$ExpGRP1 \Rightarrow SAC$	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025

	$SAC \Rightarrow Purp$	0.52	0.09	0.34	0.71	0.37	5.63	< .001
	$ExpGRP2 \Rightarrow SAC$	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	$ExpGRP3 \Rightarrow SAC$	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	$ExpGRP1 \Rightarrow Purp$	0.15	0.17	-0.20	0.49	0.06	0.84	0.402
	$ExpGRP2 \Rightarrow Purp$	-0.23	0.17	-0.57	0.12	-0.10	-1.30	0.195
	$ExpGRP3 \Rightarrow Purp$	0.37	0.18	0.02	0.72	0.14	2.07	0.038
Total	$ExpGRP1 \Rightarrow Purp$	0.00	0.18	-0.37	0.36	0.00	-0.02	0.987
	$ExpGRP2 \Rightarrow Purp$	-0.16	0.19	-0.53	0.20	-0.07	-0.87	0.385
	$ExpGRP3 \Rightarrow Purp$	0.16	0.19	-0.21	0.53	0.06	0.85	0.397

*Note.* Confidence intervals computed with method: Standard (Delta method) *Note.* Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 13.



\* p < .05, \*\* p < .01, \*\*\* p < .001

Figure 14.



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

Table 10.

Indirect and Total Effects - Purpose 2

				95% C	.I. (a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow SAC \Rightarrow Purp_2$	-0.15	0.07	-0.29	-0.01	-0.07	-2.09	0.037
	$ExpGRP2 \Rightarrow SAC \Rightarrow Purp_2$	0.06	0.07	-0.07	0.20	0.03	0.93	0.353
	$ExpGRP3 \Rightarrow$ $SAC \Rightarrow Purp_2$	-0.22	0.08	-0.37	-0.06	-0.08	-2.76	0.006
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	SAC ⇒ Purp_2	0.53	0.09	0.35	0.71	0.38	5.83	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ Purp_2	0.02	0.17	-0.31	0.36	0.01	0.13	0.895
	ExpGRP2 ⇒ Purp_2	-0.16	0.17	-0.50	0.18	-0.07	-0.94	0.348
	ExpGRP3 ⇒ Purp_2	0.18	0.18	-0.16	0.53	0.07	1.04	0.298
Total	ExpGRP1 ⇒ Purp_2	-0.13	0.18	-0.49	0.23	-0.06	-0.71	0.48
	ExpGRP2 ⇒ Purp_2	-0.10	0.19	-0.46	0.27	-0.04	-0.52	0.601
	ExpGRP3 ⇒ Purp_2	-0.03	0.19	-0.40	0.33	-0.01	-0.18	0.861

Note. Confidence intervals computed with method: Standard (Delta method)

*Note.* Betas are completely standardized effect sizes *Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 15.



\* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

Figure 16.



\* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

Table 11.

				95% C	.I. (a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow$ $SAC \Rightarrow Matter$	-0.18	0.09	-0.35	-0.01	-0.06	-2.07	0.039
	$ExpGRP2 \Rightarrow$ $SAC \Rightarrow Matter$	0.08	0.08	-0.08	0.24	0.03	0.93	0.354
	$ExpGRP3 \Rightarrow$ $SAC \Rightarrow Matter$	-0.25	0.09	-0.44	-0.07	-0.07	-2.71	0.007
Component	ExpGRP1 ⇒ SAC	-0.28	0.12	-0.53	-0.04	-0.17	-2.24	0.025
	SAC $\Rightarrow$ Matter	0.63	0.12	0.40	0.86	0.35	5.42	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ Matter	-0.47	0.22	-0.90	-0.05	-0.16	-2.17	0.03
	ExpGRP2 ⇒ Matter	-0.42	0.22	-0.85	0.01	-0.14	-1.94	0.053
	ExpGRP3 ⇒ Matter	-0.05	0.22	-0.49	0.39	-0.01	-0.22	0.824
Total	ExpGRP1 ⇒ Matter	-0.65	0.23	-1.10	-0.20	-0.22	-2.83	0.005
	ExpGRP2 ⇒ Matter	-0.34	0.23	-0.80	0.11	-0.12	-1.49	0.137
	ExpGRP3 ⇒ Matter	-0.30	0.23	-0.76	0.15	-0.08	-1.30	0.192

Indirect and Total Effects - Mattering

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 17.



Figure 18.



\* p < .05, \*\* p < .01, \*\*\* p < .001

Table 12.

				95% C.I. (a)				
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow$ $SAC \Rightarrow$ $Matter_2$	-0.18	0.09	-0.35	-0.01	-0.06	-2.06	0.04
	$SAC \Rightarrow$ $Matter_2$ $ExpGRP3 \Rightarrow$	0.08	0.08	-0.08	0.23	0.02	0.93	0.355
	SAC $\Rightarrow$ Matter_2	-0.25	0.09	-0.44	-0.07	-0.07	-2.69	0.007
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	SAC ⇒ Matter_2	0.62	0.12	0.39	0.85	0.34	5.24	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ Matter_2	-0.43	0.22	-0.87	0.01	-0.14	-1.96	0.051
	ExpGRP2 ⇒ Matter_2	-0.40	0.22	-0.83	0.04	-0.13	-1.80	0.075
	ExpGRP3 ⇒ Matter_2	-0.04	0.23	-0.49	0.41	-0.01	-0.17	0.866
Total	ExpGRP1 ⇒ Matter_2	-0.61	0.23	-1.07	-0.15	-0.20	-2.61	0.009
	ExpGRP2 ⇒ Matter_2	-0.32	0.24	-0.78	0.14	-0.11	-1.36	0.175
	ExpGRP3 ⇒ Matter 2	-0.29	0.24	-0.76	0.18	-0.08	-1.22	0.223

Indirect and Total Effects – Mattering 2

*Note.* Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.



\* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

Figure 20.



Table 13.

|--|

			95% C.I. (a)					
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow SAC \Rightarrow PA$	-0.14	0.07	-0.27	-0.01	-0.08	-2.15	0.031
	ExpGRP2 ⇒ SAC ⇒ PA	0.06	0.06	-0.07	0.19	0.03	0.93	0.35
	ExpGRP3 ⇒ SAC ⇒ PA	-0.20	0.07	-0.34	-0.07	-0.10	-2.91	0.004
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	$SAC \Rightarrow PA$	0.49	0.06	0.37	0.62	0.48	7.92	< .001

	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
Direct	ExpGRP3 ⇒ SAC	-0.40	0.13	-0.66	-0.15	-0.21	-3.13	0.002
	ExpGRP1 ⇒ PA	-0.15	0.12	-0.38	0.08	-0.09	-1.32	0.188
	ExpGRP2 ⇒ PA	-0.15	0.12	-0.38	0.08	-0.09	-1.29	0.196
	ExpGRP3 ⇒ PA	0.00	0.12	-0.24	0.23	0.00	-0.02	0.983
Total	ExpGRP1 ⇒ PA	-0.29	0.13	-0.55	-0.04	-0.17	-2.23	0.026
	ExpGRP2 ⇒ PA	-0.09	0.13	-0.35	0.17	-0.05	-0.69	0.492
	ExpGRP3 ⇒ PA	-0.20	0.13	-0.47	0.06	-0.10	-1.51	0.131

*Note.* Confidence intervals computed with method: Standard (Delta method) *Note.* Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 21.



\* *p* < 0.03, \*\* *p* < .01, \*\*\* *p* < .001

Figure 22.



\* *p* < 0.02, \*\* *p* < .01, \*\*\* *p* < .001

Table 14.

Indirect and Total Effects - Positive Affect 2

				95% C	.I. (a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow$ $SAC \Rightarrow PA_2$	-0.13	0.06	-0.25	-0.01	-0.07	-2.1	0.036
	$ExpGRP2 \Rightarrow$ $SAC \Rightarrow PA_2$	0.05	0.06	-0.06	0.17	0.03	0.93	0.353
	$ExpGRP3 \Rightarrow$ $SAC \Rightarrow PA_2$	-0.18	0.07	-0.31	-0.05	-0.08	-2.78	0.005
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	SAC $\Rightarrow$ PA_2	0.45	0.08	0.3	0.6	0.39	6.02	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ PA_2	-0.04	0.14	-0.31	0.24	-0.02	-0.25	0.803
	ExpGRP2 ⇒ PA_2	-0.11	0.14	-0.39	0.16	-0.06	-0.79	0.43
	ExpGRP3 ⇒ PA_2	0.08	0.14	-0.21	0.36	0.03	0.53	0.599
Total	ExpGRP1 ⇒ PA_2	-0.16	0.15	-0.46	0.13	-0.09	-1.08	0.278
	ExpGRP2 ⇒ PA_2	-0.06	0.15	-0.35	0.24	-0.03	-0.37	0.711
	ExpGRP3 ⇒ PA_2	-0.11	0.15	-0.41	0.19	-0.05	-0.7	0.486

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.





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

Figure 24.



\* p < .05, \*\* p < .01, \*\*\* p < .001

Table 15.

Indirect and Total Effects - Negative Affect

			_	95% C	C.I. (a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow$ $SAC \Rightarrow NA$	0.10	0.05	0.01	0.19	0.07	2.11	0.035

	ExpGRP2 ⇒ SAC ⇒ NA	-0.04	0.04	-0.13	0.05	-0.03	-0.93	0.352
	ExpGRP3 ⇒ SAC ⇒ NA	0.14	0.05	0.04	0.24	0.08	2.81	0.005
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	$SAC \Rightarrow NA$	-0.34	0.05	-0.45	-0.24	-0.40	-6.32	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ NA	-0.07	0.10	-0.27	0.13	-0.05	-0.71	0.478
	ExpGRP2 ⇒ NA	-0.21	0.10	-0.41	-0.01	-0.15	-2.11	0.035
	ExpGRP3 ⇒ NA	0.14	0.10	-0.06	0.35	0.09	1.36	0.174
Total	ExpGRP1 ⇒ NA	0.03	0.11	-0.19	0.24	0.02	0.23	0.816
	ExpGRP2 ⇒ NA	-0.26	0.11	-0.47	-0.04	-0.18	-2.31	0.021
	ExpGRP3 ⇒ NA	0.28	0.11	0.06	0.50	0.17	2.52	0.012

*Note.* Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 25.



\* p < .05, \*\* p < .01, \*\*\* p < .001

Figure 26.



\* p < .05, \*\* p < .01, \*\*\* p < .001

Table 16.

Indirect and Total Effects - Negative Affect 2

				95% C.I. (a)				
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow SAC \Rightarrow NA_2$	0.089	0.0435	0.00374	0.1742	0.0564	2.046	0.041
	$ExpGRP2 \Rightarrow$ $SAC \Rightarrow NA_2$	-0.0378	0.0409	-0.11801	0.0424	-0.0237	-0.925	0.355
	$ExpGRP3 \Rightarrow SAC \Rightarrow NA_2$	0.1268	0.0476	0.0335	0.2201	0.0689	2.664	0.008
Component	ExpGRP1 ⇒ SAC	-0.2841	0.1271	-0.53319	-0.0351	-0.1717	-2.236	0.025
	$SAC \Rightarrow NA_2$	-0.3131	0.0618	-0.43416	-0.192	-0.3283	-5.068	< .001
	ExpGRP2 ⇒ SAC	0.1208	0.1285	-0.131	0.3726	0.0722	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.405	0.1293	-0.6585	-0.1514	-0.2099	-3.131	0.002
Direct	ExpGRP1 ⇒ NA_2	0.0281	0.1156	-0.19857	0.2547	0.0178	0.243	0.808
	ExpGRP2 ⇒ NA_2	-0.2442	0.1158	-0.47119	-0.0173	-0.1531	-2.109	0.035
	ExpGRP3 ⇒ NA_2	0.2723	0.119	0.039	0.5055	0.148	2.288	0.022
Total	ExpGRP1 ⇒ NA_2	0.117	0.1213	-0.12073	0.3548	0.0742	0.965	0.335
	ExpGRP2 ⇒ NA_2	-0.2821	0.1226	-0.52244	-0.0417	-0.1768	-2.3	0.021
	ExpGRP3 ⇒ NA_2	0.3991	0.1235	0.1571	0.6411	0.2169	3.232	0.001

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes
*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 27.



\* 
$$p < 0.03$$
, \*\*  $p < .01$ , \*\*\*  $p < .001$ 

Figure 28.



\* *p* < 0.02, \*\* *p* < .01, \*\*\* *p* < .001

Table 17.

				95% C	C.I. (a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	Z	р
Indirect	$ExpGRP1 \Rightarrow$ $SAC \Rightarrow SWLS$	-0.13	0.06	-0.25	-0.01	-0.08	-2.13	0.033
	ExpGRP2 ⇒ SAC ⇒ SWLS	0.05	0.06	-0.06	0.17	0.03	0.93	0.351
	ExpGRP3 ⇒ SAC ⇒ SWLS	-0.18	0.06	-0.31	-0.06	-0.09	-2.85	0.004
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	SAC ⇒ SWLS	0.45	0.06	0.32	0.58	0.44	6.96	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.40	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ SWLS	-0.05	0.12	-0.29	0.19	-0.03	-0.43	0.668
	ExpGRP2 ⇒ SWLS	-0.24	0.12	-0.47	-3.23e-4	-0.14	-1.96	0.05
	ExpGRP3 ⇒ SWLS	0.19	0.12	-0.06	0.43	0.09	1.49	0.136
Total	ExpGRP1 ⇒ SWLS	-0.18	0.13	-0.44	0.08	-0.11	-1.35	0.176
	ExpGRP2 ⇒ SWLS	-0.18	0.13	-0.45	0.08	-0.11	-1.37	0.172
	ExpGRP3 ⇒ SWLS	0.00	0.14	-0.26	0.27	0.00	0.03	0.978

Indirect and Total Effects - Life Satisfaction

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 29.



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

Figure 30.



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

Table 18.

Indirect and 1	Total Effects	- Life Satisfaction	2
----------------	---------------	---------------------	---

Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow$ $SAC \Rightarrow$ $SWLS_2$ $ExpGRP2 \Rightarrow$	-0.13	0.06	-0.24	-0.01	-0.07	-2.10	0.036
	SAC $\Rightarrow$ SWLS_2 ExpGRP3 $\Rightarrow$	0.05	0.06	-0.06	0.17	0.03	0.93	0.353
	SAC ⇒ SWLS_2	-0.18	0.06	-0.30	-0.05	-0.08	-2.78	0.005

Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	SAC ⇒ SWLS_2	0.44	0.07	0.30	0.58	0.39	6.06	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.40	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ SWLS_2	-0.05	0.14	-0.31	0.22	-0.03	-0.35	0.729
	ExpGRP2 ⇒ SWLS_2	-0.23	0.14	-0.50	0.03	-0.12	-1.71	0.088
	ExpGRP3 ⇒ SWLS_2	0.19	0.14	-0.09	0.46	0.09	1.32	0.185
Total	ExpGRP1 ⇒ SWLS_2	-0.17	0.15	-0.46	0.11	-0.09	-1.18	0.238
	ExpGRP2 ⇒ SWLS_2	-0.18	0.15	-0.47	0.11	-0.10	-1.22	0.224
	ExpGRP3 ⇒ SWLS_2	0.01	0.15	-0.28	0.30	0.00	0.05	0.962

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

## Figure 31.



\* p < 0.025, \*\* p < .01, \*\*\* p < .001

Figure 32.



\* p < 0.002, \*\* p < .01, \*\*\* p < .001

Table 19.

### Indirect and Total Effects - Experiential Avoidance

			_	95% C.I. (a)				
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow$ $SAC \Rightarrow BEAQ$	0.09	0.04	0.00	0.17	0.05	2.01	0.045
	$ExpGRP2 \Rightarrow$ $SAC \Rightarrow BEAQ$	-0.04	0.04	-0.12	0.04	-0.02	-0.92	0.357
	$ExpGRP3 \Rightarrow$ $SAC \Rightarrow BEAQ$	0.13	0.05	0.03	0.22	0.06	2.58	0.01
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	SAC ⇒ BEAQ	-0.31	0.07	-0.44	-0.18	-0.30	-4.56	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ BEAQ	0.07	0.13	-0.18	0.35	0.04	0.52	0.602
	ExpGRP2 ⇒ BEAQ	0.08	0.13	-0.17	0.33	0.05	0.61	0.545
	ExpGRP3 ⇒ BEAQ	-0.01	0.13	-0.27	0.25	-0.01	-0.08	0.934
Total	ExpGRP1 ⇒ BEAQ	0.15	0.13	-0.10	0.41	0.09	1.17	0.243
	ExpGRP2 ⇒ BEAQ	0.04	0.13	-0.22	0.30	0.02	0.30	0.766

|--|

*Note.* Confidence intervals computed with method: Standard (Delta method) *Note.* Betas are completely standardized effect sizes *Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 33.



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

Figure 34.



# Table 20.

			_	95% C.I. (a)				
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
	$ExpGRP1 \Rightarrow$							
	$SAC \Rightarrow$							
Indirect	BEAQ_2	0.09	0.05	0.00	0.18	0.05	1.97	0.048
	ExpGRP2 ⇒							
	$SAC \Rightarrow$							0.050
	BEAQ_2	-0.04	0.04	-0.12	0.04	-0.02	-0.92	0.359
	EXPGRP3 $\Rightarrow$							
	$SAC \Rightarrow$	0.12	0.05	0.02	0.24	0.06	2 5 1	0.012
	BEAQ_2	0.15	0.05	0.05	0.24	0.00	2.51	0.012
Component	EXPGRP1 ⇒	0.29	0.12	0 5 2	0.04	0 17	2.24	0.025
component	SAC $\rightarrow$	-0.28	0.15	-0.55	-0.04	-0.17	-2.24	0.025
	BFAO 2	-0 33	0 10	-0.48	-0 17	-0.28	-4 20	< 001
	ExnGRP2 ⇒	0.55	0.10	0.40	0.17	0.20	4.20	1001
	SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒							
	SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
	$ExpGRP1 \Rightarrow$							
Direct	BEAQ_2	0.00	0.15	-0.28	0.29	0.00	0.01	0.989
	$ExpGRP2 \Rightarrow$							
	BEAQ_2	0.17	0.15	-0.12	0.45	0.09	1.14	0.255
	ExpGRP3 ⇒							
	BEAQ_2	-0.16	0.15	-0.46	0.13	-0.07	-1.10	0.273
	$ExpGRP1 \Rightarrow$							
Total	BEAQ_2	0.09	0.15	-0.20	0.39	0.05	0.63	0.528
	ExpGRP2 ⇒							
	BEAQ_2	0.13	0.15	-0.17	0.42	0.07	0.83	0.404
	ExpGRP3 ⇒							
	BEAQ_2	-0.03	0.15	-0.33	0.27	-0.01	-0.21	0.835

#### Indirect and Total Effects - Experiential Avoidance 2

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

Note. ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 35.



\* p < .05, \*\* p < .01, \*\*\* p < .001

Figure 36.



Table 21.

Indirect and Total Effects - Authenticity

Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
	$ExpGRP1 \Rightarrow$							
Indirect	SAC ⇒ WAauth	-0.12	0.06	-0.23	-0.01	-0.08	-2.14	0.033
	ExpGRP2 ⇒ SAC ⇒ WAauth	0.05	0.05	-0.06	0.16	0.03	0.93	0.351

	ExpGRP3 ⇒							
	$SAC \Rightarrow$	-0.17	0.06	-0.29	-0.05	-0.10	-2.87	0.004
	WAauth							
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.03	-0.17	-2.24	0.025
	SAC ⇒ WAauth	0.42	0.06	0.30	0.53	0.45	7.21	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ WAauth	-0.01	0.11	-0.22	0.20	-0.01	-0.08	0.937
	ExpGRP2 ⇒ WAauth	-0.02	0.11	-0.23	0.19	-0.01	-0.18	0.858
	ExpGRP3 ⇒ WAauth	0.01	0.11	-0.21	0.23	0.01	0.10	0.923
Total	ExpGRP1 ⇒ WAauth	-0.13	0.12	-0.36	0.11	-0.08	-1.06	0.288
	ExpGRP2 ⇒ WAauth	0.03	0.12	-0.21	0.27	0.02	0.26	0.798
	ExpGRP3 ⇒ WAauth	-0.16	0.12	-0.40	0.08	-0.09	-1.30	0.194

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 37.



\* p < .05, \*\* p < .01, \*\*\* p < .001

Figure 38.



Table 22.

Indirect and Total Effects – Authenticity 2

				95% C.I. (a)				
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	ExpGRP1 ⇒ SAC ⇒ WAauth_2	-0.20	0.06	-0.23	-0.01	-0.06	-2.09	0.037
	ExpGRP2 $\Rightarrow$ SAC $\Rightarrow$ WAauth_2	0.05	0.05	-0.10	0.15	0.30	0.93	0.353
	$ExpGRP3 \Rightarrow$ $SAC \Rightarrow$ $WAauth_2$	-0.17	0.06	-0.29	-0.05	-0.08	-2.75	0.006
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	SAC ⇒ WAauth_2	0.41	0.07	0.27	0.55	0.38	5.78	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.10	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ WAauth_2	0.00	0.13	-0.26	0.26	0.00	-0.02	0.986
	ExpGRP2 ⇒ WAauth_2	-0.07	0.13	-0.34	0.19	-0.04	-0.55	0.585
	ExpGRP3 ⇒ WAauth_2	0.07	0.14	-0.20	0.34	0.03	0.52	0.607
Total	ExpGRP1 ⇒ WAauth_2	-0.12	0.10	-0.40	0.16	-0.07	-0.84	0.401

ExpGRP2 ⇒ WAauth_2	-0.02	0.14	-0.31	0.60	-0.01	-0.16	0.871
ExpGRP3 ⇒ WAauth_2	-0.10	0.14	-0.38	0.19	-0.05	-0.66	0.506

*Note.* Confidence intervals computed with method: Standard (Delta method) *Note.* Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 39.



\* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

Figure 40.



\* p < .05, \*\* p < .01, \*\*\* p < .001

# Table 23.

				95% C.I. (a)				
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	ExpGRP1 ⇒ SAC ⇒ WAalien	0.21	0.10	0.02	0.40	0.08	2.15	0.032
Component	ExpGRP2 ⇒ SAC ⇒ WAalien	-0.09	0.10	-0.28	0.10	-0.03	-0.93	0.351
	ExpGRP3 ⇒ SAC ⇒ WAalien	0.30	0.10	0.10	0.50	0.10	2.90	0.004
	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	SAC ⇒ WAalien	-0.74	0.10	-0.93	-0.55	-0.47	-7.75	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ WAalien	0.15	0.18	-0.20	0.50	0.06	0.85	0.393
	ExpGRP2 ⇒ WAalien	-0.12	0.18	-0.47	0.23	-0.05	-0.68	0.499
	ExpGRP3 ⇒ WAalien	0.27	0.18	-0.09	0.64	0.09	1.49	0.137
Total	ExpGRP1 ⇒ WAalien	0.36	0.20	-0.03	0.76	0.14	1.81	0.07
	ExpGRP2 ⇒ WAalien	-0.21	0.20	-0.61	0.19	-0.08	-1.04	0.3
	ExpGRP3 ⇒ WAalien	0.57	0.20	0.17	0.98	0.19	2.81	0.005

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 41.



\* p < .05, \*\* p < .01, \*\*\* p < .001

Figure 42.



Table 24.

Indirect and Total Effects – Alienation 2

				95% C	.I. (a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	ExpGRP1 ⇒ SAC ⇒ WAalien_2 ExpGRP2 ⇒	0.23	0.11	0.02	0.44	0.08	2.14	0.032
	SAC $\Rightarrow$ WAalien_2 ExpGRP3 ⇒	-0.10	0.10	-0.30	0.12	-0.03	-0.93	0.351
	SAC ⇒ WAalien_2	0.32	0.11	0.10	0.54	0.10	2.89	0.004

Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	SAC ⇒ WAalien_2	-0.80	0.11	-1.01	-0.60	-0.46	-7.45	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ WAalien_2	0.01	0.20	-0.39	0.40	0.00	0.04	0.97
	ExpGRP2 ⇒ WAalien_2	-0.07	0.20	-0.47	0.32	-0.03	-0.36	0.718
	ExpGRP3 ⇒ WAalien_2	0.08	0.21	-0.33	0.49	0.02	0.39	0.698
Total	ExpGRP1 ⇒ WAalien_2	0.24	0.22	-0.20	0.67	0.08	1.05	0.294
	ExpGRP2 ⇒ WAalien_2	-0.17	0.23	-0.61	0.27	-0.06	-0.75	0.454
	ExpGRP3 ⇒ WAalien_2	0.40	0.23	-0.04	0.85	0.12	1.78	0.076

*Note.* Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 43.



\* p < .05, \*\* p < .01, \*\*\* p < .001

Figure 44.



Table 25.

Indirect and Total Effects - Openness to External Influence

				95% C	.I. (a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	ExpGRP1 ⇒ SAC ⇒ Wainf	0.13	0.07	0.00	0.26	0.05	1.96	0.05
	ExpGRP2 ⇒ SAC ⇒ WAinf	-0.06	0.06	-0.18	0.06	-0.02	-0.92	0.359
Component	ExpGRP3 ⇒ SAC ⇒ WAinf	0.19	0.08	0.04	0.34	0.06	2.49	0.013
	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	SAC ⇒ WAinf	-0.47	0.11	-0.69	-0.24	-0.28	-4.10	< .001
	$ExpGRP2 \Rightarrow$ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ WAinf	0.13	0.21	-0.29	0.54	0.05	0.60	0.549
	ExpGRP2 ⇒ WAinf	-0.01	0.21	-0.43	0.40	0.00	-0.06	0.95
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Total	ExpGRP1 ⇒ WAinf	0.26	0.22	-0.17	0.69	0.09	1.19	0.235
	ExpGRP2 ⇒ WAinf	-0.07	0.22	-0.50	0.36	-0.02	-0.31	0.753
	ExpGRP3 ⇒ WAinf	0.33	0.22	-0.11	0.76	0.10	1.48	0.139

Note. Confidence intervals computed with method: Standard (Delta method)

*Note.* Betas are completely standardized effect sizes *Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 45.



\* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

Figure 46.



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

Table 26.

Indirect and Total Effects - Intentions to Help Others

			_	95% C	.I. (a)			
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow SAC \Rightarrow Help_2$	-0.12	0.06	-0.24	0.00	-0.04	-1.93	0.054

	ExpGRP2 ⇒ SAC ⇒ Help_2	0.05	0.05	-0.06	0.16	0.02	0.91	0.361
	ExpGRP3 ⇒ SAC ⇒ Help_2	-0.17	0.07	-0.30	-0.03	-0.05	-2.42	0.016
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.24	0.025
	SAC ⇒ Help_2	0.42	0.11	0.20	0.63	0.26	3.81	< .001
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ Help_2	0.11	0.20	-0.29	0.51	0.04	0.55	0.58
	ExpGRP2 ⇒ Help_2	0.02	0.20	-0.38	0.42	0.01	0.10	0.918
	ExpGRP3 ⇒ Help_2	0.09	0.21	-0.32	0.50	0.03	0.44	0.661
Total	ExpGRP1 ⇒ Help_2	0.00	0.21	-0.41	0.40	0.00	-0.02	0.981
	ExpGRP2 ⇒ Help_2	0.07	0.21	-0.34	0.49	0.03	0.34	0.737
	ExpGRP3 ⇒ Help 2	-0.08	0.21	-0.49	0.34	-0.02	-0.36	0.721

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

## Figure 47.



\* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

# Table 27.

				95% C.I. (a)				
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
Indirect	$ExpGRP1 \Rightarrow$ $SAC \Rightarrow$ $Prosocial_2$	-0.06	0.04	-0.13	0.01	-0.03	-1.75	0.08
	$ExpGRP2 \Rightarrow$ $SAC \Rightarrow$ $Prosocial_2$	0.03	0.03	-0.03	0.08	0.01	0.89	0.373
	ExpGRP3 ⇒ SAC ⇒ Prosocial_2	-0.09	0.04	-0.17	-0.01	-0.04	-2.09	0.037
Component	ExpGRP1 ⇒ SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.23	0.025
	SAC ⇒ Prosocial_2	0.22	0.08	0.07	0.37	0.19	2.81	0.005
	ExpGRP2 ⇒ SAC	0.12	0.13	-0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒ SAC	-0.41	0.13	-0.66	-0.15	-0.21	-3.13	0.002
Direct	ExpGRP1 ⇒ Prosocial_2	-0.05	0.15	-0.34	0.23	-0.03	-0.38	0.707
	ExpGRP2 ⇒ Prosocial_2	-0.18	0.15	-0.47	0.11	-0.09	-1.23	0.217
	ExpGRP3 ⇒ Prosocial_2	0.13	0.15	-0.17	0.42	0.06	0.84	0.404
Total	ExpGRP1 ⇒ Prosocial_2	-0.12	0.15	-0.41	0.17	-0.06	-0.80	0.427
	ExpGRP2 ⇒ Prosocial_2	-0.15	0.15	-0.45	0.14	-0.08	-1.03	0.301
	ExpGRP3 ⇒ Prosocial 2	0.04	0.15	-0.26	0.33	0.07	0.25	0.806

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 48.



Table 28.

Indirect and Total Effects - Total Values

				95% C.I. (a)				
Туре	Effect	Estimate	SE	Lower	Upper	β	z	р
	ExpGRP1 ⇒							
Indirect	$SAC \Rightarrow$	-2.23	1.08	-4.35	-0.11	-0.06	-2.06	0.04
	VLQTotal_2							
	ExpGRP2 ⇒							
	SAC ⇒	0.95	1.02	-1.06	2.95	0.03	0.93	0.355
	VLQTotal_2							
	EXPGRP3 $\Rightarrow$	2 17	1 10	F 40	0.96	0.07	2 60	0 007
	VIOTotal 2	-5.17	1.10	-3.49	-0.80	-0.07	-2.09	0.007
	$FxnGRP1 \Rightarrow$							
Component	SAC	-0.28	0.13	-0.53	-0.04	-0.17	-2.23	0.025
	SAC ⇒							
	VLQTotal 2	7.84	1.49	4.92	10.76	0.35	5.26	< .001
	$ExpGRP2 \Rightarrow$	0.12	0.10	0.12	0.27	0.07	0.04	0 2 4 7
	SAC	0.12	0.13	13 -0.13	0.37	0.07	0.94	0.347
	ExpGRP3 ⇒	-0 41	0 13	-0.66	-0.15	-0 21	-3 13	0 002
	SAC	0.41	0.10	0.00	0.15	0.21	5.15	0.002
Direct	$ExpGRP1 \Rightarrow$	1.15	2.79	-4.32	6.61	0.03	0.41	0.681
• • •	VLQTotal_2							
	ExpGRP2 ⇒	1.01	2.79	-4.46	6.48	0.03	0.36	0.717
	VLQTotal_2							
	ExpGRP3 ⇒	0.13	2.87	-5.49	5.76	0.00	0.05	0.963
	VLQTotal_2							
Total	ExpGRP1 ⇒	-1.08	2.94	-6.84	4.67	-0.03	-0.37	0.712
lotal	vLQTotal_2							

ExpGRP2 ⇒ VLQTotal_2	1.96	2.97	-3.86	7.78	0.05	0.66	0.51
ExpGRP3 ⇒ VLQTotal_2	-3.04	2.99	-8.90	2.82	-0.07	-1.02	0.309

*Note.* Confidence intervals computed with method: Standard (Delta method) *Note.* Betas are completely standardized effect sizes

*Note.* ExpGRP1=Condition 2-1, ExpGRP2=Condition 3-1, ExpGRP3= Condition 2-3.

Figure 49.



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

Figure 50.



\* p < .05, \*\* p < .01, \*\*\* p < .001

#### Appendix B: Procedural Interview Scripts

#### Script for Condition A: Autobiographical Reasoning

(15 minutes ahead of the participants' timeslot, the assigned interviewer will send the participant a link through SONA to the secure university zoom room where the interview will take place. Once the participant enters the room, start a stopwatch on your phone or whatever your preferred method of keeping track of the time is, and begin):

"Hi, I'm \_\_\_\_\_, and I'll be leading you through this study today. I'm going to send you a link to a qualtrics survey now, which has our consent form at the beginning and which I need you to keep open throughout this study." (send the qualtrics link

<u>https://tamu.qualtrics.com/jfe/form/SV\_4MzAGdCwLLo9Ey1</u>) "Click on the link I just put in the zoom chat and take as long as you need to read the consent form, and let me know when you're finished." (When the participant indicates they have finished reading the consent form, reiterate the portion of the consent form regarding recording the interview. Say:) "Just to make sure you understand, part of this study is an interview, and the interview part of the study will be recorded. Once you have finished participating in the study, any information linking your name or contact information to the recording or your answers to our questionnaire will be erased. Once the study is completed, your interview will be permanently deleted from any records. Do you have any questions regarding confidentiality or any other part of the consent form?"

(Once all questions have been answered, say) "If you would like to proceed with the study, please select 'Yes' to the question on the qualtrics survey directly below the consent form and also write your email address and your participant ID (tell them their participant ID) in the spaces provided." (when they've done that:)

"Now, I'm going to tell you a little more about what we're going to do. This study is made up of four parts. We're going to do the first three now, and the fourth will take place about a week from now. We'll talk about next week's part after we've finished today's parts. First, I'm going to ask you about five important events that have occurred at different points during your life so far.

1. "Second, I'm going to ask you about your plans and goals for the future. Third, you'll return to the qualtrics survey and fill out a few short questionnaires. Then, we'll talk briefly about next week and today's part of the study will be done.

OR

2. "Second, you'll return to the qualtrics survey and fill out a few short questionnaires. Third, I'm going to ask you about your plans and goals for the future. Then, we'll talk briefly about next week and today's part of the study will be done.

"Before we begin, I want to assure you that you are not going to judged in any way on how you answer my questions. This isn't a professional interview. There's no one to impress, and you can take as much time as you need to think about things before you respond. I just want to learn about you and your life. Do you have any questions before we continue? (once questions have been answered) Please change your name on your zoom screen to your participant identification number (tell them their ID again) in order to protect your identity. After that, I'll begin recording and turn on zoom's automatic transcription setting." (If there are no further questions, and they remove their name from zoom, begin recording and click 'live transcription' at the bottom of the zoom screen and 'enable automatic transcription' and proceed to the first part of the interview).

#### (Part One: 'Key Events')

"I'm going to ask you about five key events in your life. A key event should be a specific, significant episode in your past set in a particular time and place. It is a specific moment in your life that stands out for some reason. So, a particular conversation you had with your mother when you were 12 or a particular decision you made one afternoon last summer might qualify as a key event. These are particular moments in a particular time and place, complete with particular people, actions, thoughts, and feelings. An entire summer vacation—be it happy or very sad or very important in some way—or a very difficult year in high school, would not qualify as key events because they take place over an extended period of time. For each event, describe in detail what happened, where you were, who was involved, what you did, and what you were thinking and feeling in the event. Also, try to convey the impact this key event has had on your life and what this event says about who you are or were as a person. Did the event change you in any way? If so, in what way? Please be very specific. I'm going to name each of the key events I'm going to ask about so you'll know what to expect, and then we'll return to the first one and begin. The events are: An important childhood memory, an important adolescent memory, a peak experience or high point in your life, a rock bottom experience or low point in your life, and another important event of your choosing. Do you have any questions?

- Please tell me about an important childhood memory, which can be any memory from your childhood, positive or negative, that stands out today. (Once they've described what the event was, make sure to follow up with questions about why the event was important, why they picked that specific event, whether that event changed their life or their views and/or what the event says about who they are or were. Another potential follow-up question is "How do you think you would have been different if this event *hadn't* happened?")
- 2) Please tell me about an important adolescent memory, again any memory, positive or negative, from your teenage years that stands out today. (Same follow up questions)
- 3) Please tell me about your peak experience or high point, the most wonderful moment in your life. Some people have trouble picking out a single best moment from their lives, so if that's the case, just pick one of the best moments of your life. (Same follow up questions)
- 4) Please tell me about your rock bottom experience. The rock bottom is supposed to be your lowest point, the worst experience of your life, but I understand that for many people their worst experience is intensely personal and that they may not feel comfortable sharing it like this. And that's totally okay. What's important is that you pick an experience that was very bad, a major low point, but that you're still comfortable discussing with as much detail as you've discussed the other life events you've talked about so far. (Same follow up questions)
- 5) Lastly, please tell me about another important event. It can be from any point in your life, be positive or negative, just another important event that stands out and says something the other memories you've discussed haven't covered. (Same follow up questions)

Thank you. That concludes the first part of your interview."

(If Part II is The Future Goals Interview, follow this script. If Part II is the questionnaire skip ahead to "Part II: Questionnaire" and follow that script)

## (Part II: Future Goals)

"I'm going to continue recording as we move into the second part of your interview. Now that you've told me a little bit about your past, I'd like you to consider the future and describe your overall plan, outline, or dream for your own future. Most of us have plans or dreams that concern what we would like to put into life and what we would like to get out of it. These dreams or plans may change over time, reflecting growth and changing experiences. Describe your present dream, plan, or outline for the future. (Follow ups: Ask them why they've chosen this as their dream or plan? What about this future and this method of getting to it appeals to you? Also, if there's time, extend the questions as far into their future as possible, until they don't seem to really know what they want after a certain point or until they reach a stopping point like retirement or death. Once they have described their general plan or outline and the reasons for it ask the following follow-up questions):

- 1. "What potential obstacles, problems, or conflicts could you see getting in the way of this future plan?"
- 2. "What are some ways you see yourself potentially addressing or overcoming these obstacles?"

### (Part III: Questionnaire)

"Thank you so much for answering all of my interview questions. I'm going to stop recording now. (stop recording) The last thing I want you to do before today's study concludes is to return to the qualtrics survey you began at the beginning of the study and finish filling it out. While you do so, I will mute myself, and you should mute yourself and turn off your video camera as well. When you've finished, unmute yourself and let me know, and I'll have a few final instructions for you." (after they finish)

#### OR

## (Part II: Questionnaire)

"I'm going to stop recording now. (stop recording) The next thing I want you to do is to return to the qualtrics survey you began at the beginning of the study and finish filling it out. While you do so, I will mute myself, and you should mute yourself and turn off your video camera as well. When you've finished, unmute yourself and let me know, and we'll continue to the final part of today's study." (after they finish)

#### (Part III: Future Goals)

"I'm going to start recording again as we move into the second part of your interview and the final part of today's study. Now that you've told me a little bit about your past, I'd like you to consider the future and describe your overall plan, outline, or dream for your own future. Most of us have plans or dreams that concern what we would like to put into life and what we would like to get out of it. These dreams or plans may change over time, reflecting growth and changing experiences. Describe your present dream, plan, or outline for the future. (Follow ups: Ask them why they've chosen this as their dream or plan. What about this future and this method of getting to it appeals to them. Also, if there's time, extend the questions as far into their future as

possible, until they don't seem to really know what they want after a certain point or until they reach a stopping point like retirement or death. Once they have described their general plan or outline and the reasons for it ask the following follow-up questions):

- 1. "What potential obstacles, problems, or conflicts could you see getting in the way of this future plan?"
- 2. "What are some ways you see yourself potentially addressing or overcoming these obstacles?"

## (Afterword)

"Thank you so much for participating in our study. Around this time next week, you will receive an email with a link to another brief series of questionnaires on qualtrics. Please fill it out on the same day you receive it. After it's completed, you'll be granted three credits."

(Download the recording, and label it with the participant number and condition letter. Upload the video onto the project drive. Once you have verified that it has uploaded correctly, delete the video from your personal computer. Then, go to \_\_\_\_\_\_ survey on qualtrics and schedule an automatic email to be sent to the participant whose interview you just finished exactly one week from today at the same time they were scheduled to begin today's study. The script for the standardized email is below:)

Subject: One-Week Follow Up for Study #\_\_\_\_\_

Hello \_\_\_\_\_,

Your link to final part of the study you began one week ago is below. You will have until 11:59 PM tonight to complete this survey. At the start of the survey, you will be asked to enter your participant ID—that ID is \_\_\_\_\_. Once you have finished the survey, you should be automatically granted SONA credit.

<Link>

Thank you,

The EPC Research Team

#### Script for Conditions B: Memory Reexperiencing

(15 minutes ahead of the participants' timeslot, the assigned interviewer will send the participant a link through SONA to the secure university zoom room where the interview will take place. Once the participant enters the room, start a stopwatch on your phone or whatever your preferred method of keeping track of the time is, and begin):

"Hi, I'm \_\_\_\_\_, and I'll be leading you through this study today. I'm going to send you a link to a qualtrics survey now, which has our consent form at the beginning and which I need you to keep open throughout this study." (send the qualtrics link <u>https://tamu.qualtrics.com/jfe/form/SV\_4MzAGdCwLLo9Ey1</u>) "Click on the link I just put in the zoom chat and take as long as you need to read the consent form, and let me know when you're finished." (When the participant indicates they have finished reading the consent form, reiterate the portion of the consent form regarding recording the interview. Say:) "Just to make sure you understand, part of this study is an interview, and the interview part of the study will be recorded. Once you have finished participating in the study, any information linking your name or contact information to the recording or your answers to our questionnaire will be erased. Once the study is completed, your interview will be permanently deleted from any records. Do you have any questions regarding confidentiality or any other part of the consent form?"

(Once all questions have been answered, say) "If you would like to proceed with the study, please select 'Yes' to the question on the qualtrics survey directly below the consent form and also write your email address and your participant ID (tell them their participant ID) in the spaces provided." (when they've done that:)

"Now, I'm going to tell you a little more about what we're going to do. This study is made up of four parts. We're going to do the first three now, and the fourth will take place about a week from now. We'll talk about next week's part after we've finished today's parts. First, I'm going to ask you about five important events that have occurred at different points during your life so far.

3. "Second, I'm going to ask you about your plans and goals for the future. Third, you'll return to the qualtrics survey and fill out a few short questionnaires. Then, we'll talk briefly about next week and today's part of the study will be done.

OR

4. "Second, you'll return to the qualtrics survey and fill out a few short questionnaires. Third, I'm going to ask you about your plans and goals for the future. Then, we'll talk briefly about next week and today's part of the study will be done.

"Before we begin, I want to assure you that you are not going to judged in any way on how you answer my questions. This isn't a professional interview. There's no one to impress, and you can take as much time as you need to think about things before you respond. I just want to learn about you and your life. Do you have any questions before we continue? (once questions have been answered) Please change your name on your zoom screen to your participant identification number (tell them their ID again) in order to protect your identity. (If there are no further questions, and they remove their name from zoom, begin recording and click 'live transcription' at the bottom of the zoom screen and 'enable automatic transcription' and proceed to the first part of the interview).

#### (Part I: 'Key Events')

I'm going to ask you about five key events in your life. A key event should be a specific, significant episode in your past set in a particular time and place. It is a specific moment in your life that stands out for some reason. So, a particular conversation you had with your mother when you were 12 years old or a particular decision you made one afternoon last summer might qualify as a key event. These are particular moments in a particular time and place, complete with particular people, actions, thoughts, and feelings. An entire summer vacation—be it happy or very sad or very important in some way—or a very difficult year in high school, would not qualify as key events because they take place over an extended period of time. For each event, describe in detail what happened, where you were, who was involved, what you did, and what you were thinking and feeling in the event. Please be very specific. I'm going to name each of the key events I'm going to ask about so you'll know what to expect, and then we'll return to the first one and begin. The events are: An important childhood memory, an important adolescent memory, a peak experience or high point in your life, a rock bottom or low point in your life, and another important event of your choosing. Do you have any questions?

- 1) Please tell me about an important childhood memory, which can be any memory from your childhood, positive or negative, that stands out today. (Encourage them to elaborate in as much detail as possible—while being mindful of the time and gently steer the discussion away from topics like why the memory is important, how it affected them after the event, or what the event says about them as a person)
- 2) Please tell me about an important adolescent memory, again any memory positive or negative from your teenage years that stands out today. (Encourage them to elaborate in as much detail as possible—while being mindful of the time and gently steer the discussion away from topics like why the memory is important, how it affected them after the event, or what the event says about them as a person)
- 3) Please tell me about your high point, the most wonderful moment in your life. Some people have trouble picking out a single best moment from their lives, so if that's the case, just pick one of the best moments of your life. (Encourage them to elaborate in as much detail as possible—while being mindful of the time and gently steer the discussion away from topics like why the memory is important, how it affected them after the event, or what the event says about them as a person)
- 4) Please tell me about your rock bottom experience. The rock bottom is supposed to be your lowest point, the worst experience of your life, but I understand that, for many people, their worst experience is intensely personal that they may not feel comfortable sharing like this. And that's totally okay. What's important is that you pick an experience that was very bad, a major low point, but that you're still comfortable discussing with as much detail as you've discussed the other life events you've talked about so far. (Encourage them to elaborate in as much detail as possible—while being mindful of the time and gently steer the discussion away from topics like why the memory is important, how it affected them after the event, or what the event says about them as a person)
- 5) Lastly, please tell me about another important event. It can be from any point in your life, be positive or negative, just another important event that stands out and that you'd like to share." (Encourage them to elaborate in as much detail as possible—while being mindful of the time and gently steer the discussion away from topics like why the memory is

important, how it affected them after the event, or what the event says about them as a person)

Thank you. That concludes the first part of your interview."

# (If Part II is The Future Goals Interview, follow this script. If Part II is the questionnaire skip ahead to "Part II: Questionnaire" and follow that script)

## (Part II: Future Goals)

"I'm going to continue recording as we move into the second part of your interview. Now that you've told me a little bit about your past, I'd like you to consider the future and describe your overall plan, outline, or dream for your own future. Most of us have plans or dreams that concern what we would like to put into life and what we would like to get out of it. These dreams or plans may change over time, reflecting growth and changing experiences. Describe your present dream, plan, or outline for the future. (Follow ups: Ask them why they've chosen this as their dream or plan. What about this future and this method of getting to it appeals to them. Also, if there's time, extend the questions as far into their future as possible, until they don't seem to really know what they want after a certain point or until they reach a stopping point like retirement or death. Once they have described their general plan or outline and the reasons for it ask the following follow-up questions):

- 3. "What potential obstacles, problems, or conflicts could you see getting in the way of this future plan?"
- 4. "What are some ways you see yourself potentially addressing or overcoming these obstacles?"

## (Part III: Questionnaire)

"Thank you so much for answering all of my interview questions. I'm going to stop recording now. (stop recording) The last thing I want you to do before today's study concludes is to return to the qualtrics survey you began at the beginning of the study and finish filling it out. While you do so, I will mute myself, and you should mute yourself and turn off your video camera as well. When you've finished, unmute yourself and let me know, and I'll have a few final instructions for you." (after they finish)

## OR

## (Part II: Questionnaire)

"I'm going to stop recording now. (stop recording) The next thing I want you to do is to return to the qualtrics survey you began at the beginning of the study and finish filling it out. While you do so, I will mute myself, and you should mute yourself and turn off your video camera as well. When you've finished, unmute yourself and let me know, and we'll continue to the final part of today's study." (after they finish)

## (Part III: Future Goals)

"I'm going to start recording again as we move into the second part of your interview and the final part of today's study. Now that you've told me a little bit about your past, I'd like you to consider the future and describe your overall plan, outline, or dream for your own future. Most of

us have plans or dreams that concern what we would like to put into life and what we would like to get out of it. These dreams or plans may change over time, reflecting growth and changing experiences. Describe your present dream, plan, or outline for the future. (Follow ups: Ask them why they've chosen this as their dream or plan. What about this future and this method of getting to it appeals to them. Also, if there's time, extend the questions as far into their future as possible, until they don't seem to really know what they want after a certain point or until they reach a stopping point like retirement or death. Once they have described their general plan or outline and the reasons for it ask the following follow-up questions):

- 3. "What potential obstacles, problems, or conflicts could you see getting in the way of this future plan?"
- 4. "What are some ways you see yourself potentially addressing or overcoming these obstacles?"

### (Afterword)

"Thank you so much for participating in our study. Around this time next week, you will receive an email with a link to another brief series of questionnaires on qualtrics. Please fill it out on the same day you receive it. After it's completed, you'll be granted three credits."

(Download the recording, and label it with the participant number and condition letter. Upload the video onto the project drive. Once you have verified that it has uploaded correctly, delete the video from your personal computer. Then, go to \_\_\_\_\_\_ survey on qualtrics and schedule an automatic email to be sent to the participant whose interview you just finished exactly one week from today at the same time they were scheduled to begin today's study. The script for the standardized email is below:)

Subject: One-Week Follow Up for Study #\_\_\_\_\_

Hello \_\_\_\_\_,

Your link to final part of the study you began one week ago is below. You will have until 11:59 PM tonight to complete this survey. At the start of the survey, you will be asked to enter your participant ID—that ID is \_\_\_\_\_. Once you have finished the survey, you should be automatically granted SONA credit.

<Link>

Thank you,

The EPC Research Team

#### **Script for Conditions C: Recent Remembrance**

(15 minutes ahead of the participants' timeslot, the assigned interviewer will send the participant a link through SONA to the secure university zoom room where the interview will take place. Once the participant enters the room, start a stopwatch on your phone or whatever your preferred method of keeping track of the time is, and begin):

"Hi, I'm \_\_\_\_\_, and I'll be leading you through this study today. I'm going to send you a link to a qualtrics survey now, which has our consent form at the beginning and which I need you to keep open throughout this study." (send the qualtrics link <u>https://tamu.qualtrics.com/jfe/form/SV\_4MzAGdCwLLo9Ey1</u>) "Click on the link I just put in the zoom chat and take as long as you need to read the consent form, and let me know when you're finished." (When the participant indicates they have finished reading the consent form, reiterate the portion of the consent form regarding recording the interview. Say:) "Just to make sure you understand, part of this study is an interview, and the interview part of the study will be recorded. Once you have finished participating in the study, any information linking your name or contact information to the recording or your answers to our questionnaire will be erased. Once the study is completed, your interview will be permanently deleted from any records. Do you have any questions regarding confidentiality or any other part of the consent form?"

(Once all questions have been answered, say) "If you would like to proceed with the study, please select 'Yes' to the question on the qualtrics survey directly below the consent form and also write your email address and your participant ID (tell them their participant ID) in the spaces provided." (when they've done that:)

"Now, I'm going to tell you a little more about what we're going to do. This study is made up of four parts. We're going to do the first three now, and the fourth will take place about a week from now. We'll talk about next week's part after we've finished today's parts. First, I'm going to ask you to describe what you did yesterday in great detail.

5. "Second, I'm going to ask you about your plans and goals for the future. Third, you'll return to the qualtrics survey and fill out a few short questionnaires. Then, we'll talk briefly about next week and today's part of the study will be done.

#### OR

6. "Second, you'll return to the qualtrics survey and fill out a few short questionnaires. Third, I'm going to ask you about your plans and goals for the future. Then, we'll talk briefly about next week and today's part of the study will be done.

"Before we begin, I want to assure you that you are not going to judged in any way on how you answer my questions. This isn't a professional interview. There's no one to impress, and you can take as much time as you need to think about things before you respond. I just want to learn about you and your life. Do you have any questions before we continue? (once questions have been answered) Please change your name on your zoom screen to your participant identification number (tell them their ID again) in order to protect your identity. (If there are no further questions, and they remove their name from zoom, begin recording and click 'live transcription' at the bottom of the zoom screen and 'enable automatic transcription' and proceed to the first part of the interview).

### (Part I: 'Yesterday's Events')

"I'm going to ask you to tell me about your day yesterday. You're free to tell me about the events of your day in any way you want. For example, you might want to start describing everything in detail from the moment you woke up. Or you might want to provide a general outline of your day and then go back and fill in the details. Or something else entirely. But it's important that you be very specific about whatever you're telling me. Describe in detail what happened, where you were, who was involved, what you did, and what you were thinking and feeling. I may break in occasionally to ask for more detail or clarification. Do you have any questions? Begin when you're ready. (Encourage them to elaborate in as much detail as possible and gently steer the discussion away from introspective reflection, from digressions into events that happened before the previous day, and from forays into future plans.)

(After 30 minutes have elapsed and they reach an appropriate pausing point, say:) Thank you, that's as much time as we have for this first part of your interview."

# (If Part II is The Future Goals Interview, follow this script. If Part II is the questionnaire skip ahead to "Part II: Questionnaire" and follow that script)

## (Part II: Future Goals)

"I'm going to continue recording as we move into the second part of your interview. Now that you've told me about your day yesterday, I'd like you to consider the future and describe your overall plan, outline, or dream for your own future. Most of us have plans or dreams that concern what we would like to put into life and what we would like to get out of it. These dreams or plans may change over time, reflecting growth and changing experiences. Describe your present dream, plan, or outline for the future. (Follow ups: Ask them why they've chosen this as their dream or plan. What about this future and this method of getting to it appeals to them. Also, if there's time, extend the questions as far into their future as possible, until they don't seem to really know what they want after a certain point or until they reach a stopping point like retirement or death. Once they have described their general plan or outline and the reasons for it ask the following follow-up questions):

- 5. "What potential obstacles, problems, or conflicts could you see getting in the way of this future plan?"
- 6. "What are some ways you see yourself potentially addressing or overcoming these obstacles?"

#### (Part III: Questionnaire)

"Thank you so much for answering all of my interview questions. I'm going to stop recording now. (stop recording) The last thing I want you to do before today's study concludes is to return to the qualtrics survey you began at the beginning of the study and finish filling it out. While you do so, I will mute myself, and you should mute yourself and turn off your video camera as well. When you've finished, unmute yourself and let me know, and I'll have a few final instructions for you." (after they finish)

OR

#### (Part II: Questionnaire)

"I'm going to stop recording now. (stop recording) The next thing I want you to do is to return to the qualtrics survey you began at the beginning of the study and finish filling it out. While you do so, I will mute myself, and you should mute yourself and turn off your video camera as well. When you've finished, unmute yourself and let me know, and we'll continue to the final part of today's study." (after they finish)

## (Part III: Future Goals)

"I'm going to start recording again as we move into the second part of your interview and the final part of today's study. Now that you've told me about your day yesterday, I'd like you to consider the future and describe your overall plan, outline, or dream for your own future. Most of us have plans or dreams that concern what we would like to put into life and what we would like to get out of it. These dreams or plans may change over time, reflecting growth and changing experiences. Describe your present dream, plan, or outline for the future. (Follow ups: Ask them why they've chosen this as their dream or plan. What about this future and this method of getting to it appeals to them. Also, if there's time, extend the questions as far into their future as possible, until they don't seem to really know what they want after a certain point or until they reach a stopping point like retirement or death. Once they have described their general plan or outline and the reasons for it ask the following follow-up questions):

- 5. "What potential obstacles, problems, or conflicts could you see getting in the way of this future plan?"
- 6. "What are some ways you see yourself potentially addressing or overcoming these obstacles?"

#### (Afterword)

"Thank you so much for participating in our study. Around this time next week, you will receive an email with a link to another brief series of questionnaires on qualtrics. Please fill it out on the same day you receive it. After it's completed, you'll be granted three credits."

(Download the recording, and label it with the participant number and condition letter. Upload the video onto the project drive. Once you have verified that it has uploaded correctly, delete the video from your personal computer. Then, go to \_\_\_\_\_\_ survey on qualtrics and schedule an automatic email to be sent to the participant whose interview you just finished exactly one week from today at the same time they were scheduled to begin today's study. The script for the standardized email is below:)

Subject: One-Week Follow Up for Study #\_\_\_\_\_

Hello \_\_\_\_\_,

Your link to final part of the study you began one week ago is below. You will have until 11:59 PM tonight to complete this survey. At the start of the survey, you will be asked to enter your participant ID—that ID is \_\_\_\_\_. Once you have finished the survey, you should be automatically granted SONA credit.

<Link>

Thank you,

The EPC Research Team

Appendix C: Survey Measures

### **Multidimensional Meaning in Life Scale**

Using the scale, please indicate your current feelings by selecting how much you agree or disagree with the following statements:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Somewhat Disagree
- 4 = Neither Agree or Disagree
- 5 = Somewhat Agree
- 6 = Agree
- 7 = Strongly Agree
- 1. My life as a whole has meaning.
- 2. My entire existence is full of meaning.
- 3. My life is meaningless.
- 4. My existence is empty of meaning.
- 5. I can make sense of the things that happen in my life.
- 6. Looking at my life as a whole, things seem clear to me.
- 7. I can't make sense of events in my life.
- 8. My life feels like a sequence of unconnected events.
- 9. I have a good sense of what I am trying to accomplish in life.
- 10. I have certain life goals that compel me to keep going.
- 11. I don't know what I am trying to accomplish in life.
- 12. I don't have compelling life goals that keep me going.
- 13. Whether my life ever existed matters even in the grand scheme of the universe.
- 14. Even considering how big the universe is, I can say that my life matters.
- 15. My existence is not significant in the grand scheme of things.
- 16. Given the vastness of the universe, my life does not matter.

### Satisfaction with Life Scale:

*Instructions:* Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- + 5 Strongly agree
- 4 Agree
- + 3 Neither agree nor disagree
- 2 Disagree
- 1 Strongly disagree
- \_\_\_\_ In most ways my life is close to my ideal.
- \_\_\_\_\_ The conditions of my life are excellent.
- \_\_\_\_ I am satisfied with my life.
- \_\_\_\_\_ So far I have gotten the important things I want in life.
- \_\_\_\_\_ If I could live my life over, I would change almost nothing.

#### Scoring:

Though scoring should be kept continuous (sum up scores on each item), here are some cutoffs to be used as benchmarks.

- 31 35 Extremely satisfied
- 26 30 Satisfied
- 21 25 Slightly satisfied
- 20 Neutral
- 15 19 Slightly dissatisfied
- 10 14 Dissatisfied
- 5 9 Extremely dissatisfied

# Authentic Personality Questionnaire

Respond to the following statements by indicating the extent to which each item describes you

The scale ranges from 1 (does not describe me at all) to 7 (describes me very well)

1.	I think	it is be	tter to b	e yours	elf, thar	n to be p	opular.	
		1	2	3	4	5	6	7
2.	I don't	know l 1	how I re 2	eally fee 3	el inside 4	5	6	7
3.	I am st 1	rongly 2	influend 3	ced by t 4	he opin 5	ions of 6	others. 7	
4.	I usual	ly do w 1	hat othe 2	er peopl 3	le tell m 4	e to do. 5	6	7
5.	I alway	ys feel I 1	need to 2	o do wh 3	at other 4	s expec 5	t me to 6	do. 7
6.	Other ]	people i 1	influenc 2	e me gi 3	eatly. 4	5	6	7
7.	I feel a	us if I do 1	on't kno 2	ow myse 3	elf very 4	well. 5	6	7
8.	I alway	ys stand 1	l by wha 2	at I beli 3	eve in. 4	5	6	7
9.	I am tr	ue to m 1	yself in 2	most si 3	ituation 4	s. 5	6	7
10	. I feel c	out of to 1	ouch wit 2	th the 'r 3	eal me. <sup>7</sup> 4	5	6	7
11.	. I live i	n accore 1	dance w 2	vith my 3	values a 4	and beli 5	efs. 6	7
12	. I feel a	lienateo 1	d from 1 2	nyself. 3	4	5	6	7

## The Positive and Negative Affect Schedule (PANAS)

Question, Measure, and Item Order

Question: Right now, I feel...

Items:

Joyful Angry Sad Energized Depressed Calm Happy Nervous Stressed Content Cheerful Frustrated Scared Pleased Anticipation Confident Bored Worried/Anxious Amused Interested

The scale ranges from 1 (very slightly or not at all) to 5 (extremely)
# Self-Concept Clarity Scale

1. My beliefs about myself often conflict with one another.\*

2. On one day I might have one opinion of myself and on another day I might have a different opinion.\*

3. I spend a lot of time wondering about what kind of person I really am.\*

4. Sometimes I feel that I am not really the person that I appear to be.\*

5. When I think about the kind of person I have been in the past, I'm not sure what I was really like.\*

6. I seldom experience conflict between the different aspects of my personality.

7. Sometimes I think I know other people better than I know myself. \*

8. My beliefs about myself seem to change very frequently.\*

9. If I were asked to describe my personality, my description might end up being different from one day to another day.\*

10. Even if I wanted to, I don't think I could tell someone what I'm really like.\*

11. In general, I have a clear sense of who I am and what I am.

12. It is often hard for me to make up my mind about things because I don't really know what I want.\*

Scale ranges from 1 (*strongly disagree*) to 7 (*strongly agree*). \* Indicates reverse-keyed item

## ▼ Schnell Crisis of Meaning Scale

nell								
\$		Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<b>2</b> ≮	When I think about the meaning of my life I find only emptiness.	0	0	0	0	0	0	0
	My life seems meaningless.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
	I don't see any sense in life.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
	I suffer from the fact that I don't see any point in life.	$\bigcirc$	0	0	$\bigcirc$	0	$\bigcirc$	0
	My life seems empty.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

Please rate your agreement or disagreement with the following statements using the scale provided.

## The Meaning in Life Questionnaire

MLQ Please take a moment to think about what makes your life feel important to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers. Please answer according to the scale below:

Absolutely Untrue 1	Mostly Untrue 2	Somewhat Untrue 3	Can't Say True or False 4	Somewhat True 5	Mostly True 6	Absolutely True 7						
1	_ I understand m	y life's meaning.										
2	2 I am looking for something that makes my life feel meaningful.											
3	3 I am always looking to find my life's purpose.											
4	<ol> <li>My life has a clear sense of purpose.</li> </ol>											
5	_ I have a good s	sense of what make	s my life meaningful.									
б	I have discover	ed a satisfying life	purpose.									
7	I am always se	arching for somethi	ing that makes my life	e feel significant.								
8.	_I am seeking a	purpose or mission	for my life.									
9.	_ My life has no	clear purpose.										

10. \_\_\_\_ I am searching for meaning in my life.

MLQ syntax to create Presence and Search subscales: Presence = 1, 4, 5, 6, & 9-reverse-coded Search = 2, 3, 7, 8, & 10

## ✓ Survey of Autobiographical Memory

Q221
 Q
 Q
 Q
 X<sup>4</sup>

Please indicate the strength of your agreement with each of the following statements about your general memory of personal past events.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
When I remember events in my past, I remember a lot of sensory details.	0	0	0	0	0	0	0
When I remember events in my past, I cannot generally recall what people looked like or what they were wearing.	0	0	0	0	0	0	0
When I remember events in my past, I can generally recall objects that were in the environment.	0	0	0	0	0	0	0
Details of what I was thinking or feeling during past events is difficult for me to recall.	0	0	0	0	0	0	0
I cannot easily recall what caused specific events in my past.	0	$\bigcirc$	0	$\bigcirc$	0	$\bigcirc$	$\bigcirc$
I can easily recall how specific events in my past affected me.	0	0	0	0	0	0	0
When I remember events in my past, I can quickly see how those events relate to who I am today.	0	0	0	0	0	0	0
When I remember events in my past, it is difficult for me to imagine how my life would have changed if those events had happened differently.	0	0	0	0	0	0	0

#### Strivings and Goal Concordance

Think back on the Future Goals and Dreams section of your interview last week and identify the three most important goals or dreams you have for your future (It is okay if you did not mention these goals or dreams during the interview). On the following pages, please list a goal or dream and answer the related questions using the scales provided.

Q227

Q225

Ö

My most important goal is:

Q231

## Please answer the following questions about your goal: \${q://QID235/ChoiceGroup/AllChoicesTextEntry}.

Strongly disagree	Disagree	Somewhat disagree	nor disagree	Somewhat agree	Agree	Strongly agree
0	0	0	$\bigcirc$	$\bigcirc$	0	0
$\bigcirc$						
	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
	0 0 0	<ul><li>O</li><li>O</li><li>O</li><li>O</li><li>O</li><li>O</li><li>O</li></ul>	0       0       0         0       0       0         0       0       0         0       0       0         0       0       0	0       0       0         0       0       0         0       0       0         0       0       0         0       0       0	0       0       0       0         0       0       0       0       0         0       0       0       0       0         0       0       0       0       0         0       0       0       0       0	O         O         O         O         O           O         O         O         O         O         O           O         O         O         O         O         O         O           O         O         O         O         O         O         O         O           O         O         O         O         O         O         O         O

#### APPENDIX B

#### Intentions to Help Solve Problems in the World

In this part of the study, we ask about your thoughts and opinions.

Please rate to what extent you agree/disagree with each of the following statements. Using the following scale, place a number next to each statement to indicate your opinion.

Strongly agree				Neither agree nor disagree				Strongly Disagree
1	2	3	4	5	6	7	8	9

\_\_\_\_\_ I like to help when I know it will help solve a problem.

It is important to me to help others in need.

- \_\_\_\_\_ I strive to make the world a better place.
- \_\_\_\_\_ If I see someone in distress, I will try to help them.
- \_\_\_\_\_ If I think there is a problem in the world, I do everything I can to fix it.
- \_\_\_\_\_ The best way to solve a world problem is to take action myself.

#### Prosocial Behavioral Intentions Scale

**Instructions:** Imagine that you encounter the following opportunities to help others. Please indicate how willing you would be to perform each behavior from 1 (*Definitely would not do this*) to 7 (*Definitely would do this*). If you are more likely to complete one task (e.g., help a stranger find a key) than another (e.g., help a stranger find a missing pet), please respond to the task that you would be more likely to perform.<sup>\*</sup>

1. Comfort someone I know after they experience a hardship

2. Help a stranger find something they lost, like their key or a pet

3. Help care for a sick friend or relative

4. Assist a stranger with a small task (e.g., help carry groceries, watch their things while they use the restroom) **Scoring:** Calculate the mean of scores on all items.

\* The final sentence was not part of the original instructions, but is recommended for future use.

## Brief Experiential Avoidance Questionnaire

. .

1	2				6
trongly	moderately	slightly	slightly	moderately	strongly
lisagree	disagree	disagree	agree	agree	agree

1	The key to a good life is never feeling any pain	1	2	3	4	5	6
2	I'm quick to leave any situation that makes me feel uneasy	1	2	3	4	5	5
4	When unpleasant memories come to me, I try to put them out of my mind	1	2	3	4	5	15
4	I feel disconnected from my emotions	1	2	3	4	5	6
3	I won't do something until I absolutely have to	1	2	3	4	5	Б
6.	Fear or anxiety won't stop me from doing something important	1	2	3	4	5	6
-7.	1 would give up a lot not to feel bad	1	2	3	4	5	6
8	I rarely do something if there is a chance that it will upset me	1	2	3	4	5	ĥ
9,	It's hard for me to know what I'm feeling	1	2	3	1	5	6
10	I try to put off unpleasant tasks for as long as possible	1	2	3	4	5	6
11	I go out of my way to avoid uncomfortable situations	1	2	3	4	5	6
12	One of my big goals is to be free from painful emotions	1	2	3	$^{\dagger}$	5	6
13	I work hard to keep out upsetting feelings	1	2	3	4	6	6
14	If I have any doubts about doing something, I just won't do it	1	2	3	4	5	6
ť3	Pain always leads to suffering	1	2	3	4	5	6

Note. To score, first reverse key Item 6 (i.e., subtract the value from 7), then sum all items.

Below are domains of life that are valued by some people. Rate the importance of each domain on a scale of 1 to 10; 1 means that domain is not at all important, and 10 means that domain is very important. Not everyone will value all of these domains, or value all domains the same. Rate each domain according to your own personal sense of importance.

	Not at all important - 1	2	3	4	5	6	7	8	9	Extremely Important - 10
Family relations (other than marriage or parenting)	0	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	0	0	$\bigcirc$	0	$\bigcirc$
Marriage/couples/intimate relationships	0	$\bigcirc$	$\bigcirc$	0	0	$\bigcirc$	0	0	$\bigcirc$	$\bigcirc$
Parenting	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Friends/social relations	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Employment	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Education/training	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Recreation	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Spirituality	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Citizenship/community life	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Physical well-being	0	$\bigcirc$								

In this section, rate how consistent your actions over the past week have been with each value. Rate each item on a scale of 1 to 10; 1 means that your actions have been fully inconsistent with your value, and 10 means that your actions have been fully consistent with your value.

	Not at all consistent - 1	2	3	4	5	6	7	8	9	Extremely consistent -10
Family relations (other than marriage or parenting)	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	0
Marriage/couples/intimate relationships	0	$\bigcirc$								
Parenting	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Friends/social relations	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Employment	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Education/training	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Recreation	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Spirituality	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Citizenship/community life	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Physical well-being	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

# Self-as-Context Scale

Factor loadings for exploratory factor analysis with Promax rotation of SACS.

SACS Items		Subscales	
		Centering	Transcending
1.	When I am upset, I am able to find a place of calm within myself.	0.628	0.006
2.	I have a perspective on life that allows me to deal with life's disappointments without getting overwhelmed with them.	0.771	0.035
3.	Despite the many changes in my life, there is a basic part of who I am that remains unchanged.	-0.150	0.706
4.	As I look back upon my life so far, I have a sense that part of me has been there for all of it.	-0.120	0.793
5.	I allow my emotions to come and go without struggling with them.	0.720	-0.104
6.	I am able to notice my changing thoughts without getting caught up in them.	0.875	-0.130
7.	There is a basic sense I have of myself that doesn't change even though my thoughts and feelings do.	0.215	0.524
8.	Though I have had many roles in life, I have always had a sense of myself that is stable and enduring. $^{a}$	0.363	0.440
9.	Even though there have been many changes in my life, I'm aware of a part of me that has witnessed it all.	0.083	0.603
10.	I am able to access a perspective from which I can notice my thoughts, feelings, and emotions.	0.316	0.372
11.	When I think back to when I was younger, I recognize that a part of me that was there then is still here now.	- 0.099	0.620

Factor loadings  $\geq 0.32$  are in boldface.

<sup>a</sup> Nonretained item.