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## Elaboration, Resolution, and Coping in the Covid-19 Narratives of College Students: Relations to Identity Development

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ELABORATION, RESOLUTION, AND COPING IN THE COVID-19  
NARRATIVES OF COLLEGE STUDENTS:  
RELATIONS TO IDENTITY DEVELOPMENT

by

MAHA YASMEEN HALABI

A thesis submitted in partial fulfillment of the requirements  
for the Honors in the Major Program in Psychology  
in the College of Sciences  
and in the Burnett Honors College  
at the University of Central Florida  
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Thesis Chair: Widaad Zaman, Ph.D.

## **ABSTRACT**

Previous research has shown that talking about highly significant experiences in more elaborative ways and with greater meaning-making is related to better identity development in emerging adults (McLean & Pratt, 2006). Expressing personally significant experiences through narratives allows individuals to construct coherent autobiographical stories about the self, connecting their past, present, and future selves into a coherent whole, which ultimately contributes to healthy identity development (Pennebaker & Seagal, 1999). In this research, we examined the Covid-19 narratives of college students in relation to identity development. Data was collected from 218 emerging adult college students, ages 18 and above, both males and females. Nine narrative prompts asked participants to reflect on the meaning of their Covid-19 experiences, e.g., “Describe your most difficult experience during the pandemic. Describe in detail what happened or is happening (including when it happened, your feelings, and who was involved).” Participants also filled out questionnaires measuring their identity development and identity distress. Narratives were coded for elaboration and resolution on a 0- to 3-point scale, with 0 being no elaboration/resolution and 3 being high elaboration/positive resolution. Narratives were also coded for level and type of stress and coping. We hypothesized that those with greater elaboration and resolution, better coping, and less stress in their narratives would show greater identity development and less identity distress. The results did not support the hypothesis, but we found other compelling results from exploratory analyses examining the type of stress and coping in relation to identity development. These results pointed to the importance of narrative processing of highly significant experiences, in this case, the Covid-19 pandemic, for continued advancement in identity development in emerging adults.

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## INTRODUCTION

Identity development is influenced by both internal and external factors, such as biological and social factors, and crucial during adolescence. Having a strong sense of self is connected to having higher self-esteem or a clearer outlook in life while having a weak sense of self results in identity distress and confusion (Erikson, 1968; Orenstein & Lewis, 2020). Identity formation does not begin or finish with adolescence, but is a lifelong process (Erikson, 1956), and takes many forms of processing. In this study, we consider one such method of processing, namely, narrative processing of identity-shaping experiences.

Erikson (1968) suggests that people go through stages of development throughout their entire lives—from infancy to late adulthood—in which each stage of development contains a crisis that an individual must overcome in order to positively develop their sense of self, while failure to do so will hinder that development (Orenstein & Lewis, 2020). It is widely believed that identity formation is one of the most important tasks during adolescence, embodying the transition into adulthood (Marcia, 2006). Erikson (1968) suggests that the crisis of adolescence is identity development, in which adolescents must overcome conflicts in identity to positively develop their sense of self. If one were to not experience a positive identity development, according to Erikson (1968), the alternative is role confusion and difficulties for the remainder of the individual's life.

Having a clear, secure, and resolved identity is considered the most mature status that individuals can reach, but that achievement is not necessarily reached at the end of adolescence (Erikson, 1968; Marcia, 1966). The ability to build personal connections, psychological flexibility, and controlling self-esteem are all linked to success in identity development. Identity

formation is important for growth throughout life, but it is especially important in late adolescence and emerging adulthood (Erikson, 1968). The ability for abstract thinking that arises in adolescence is required for inferring bigger meanings from prior experiences (Erikson, 1963, 1968; Piaget, 1965). In this study, we will examine how emerging adults create meaning from a highly significant experience and how this correlates with their identity development.

Moreover, identity is formed as a construct of one's life experiences. Identity status was established by Marcia to characterize and classify four distinct developmental identity stations: identity diffusion, foreclosure, moratorium, and achievement. (Marica, 1987). The identity-diffusion status describes people who have neither investigated their options nor committed to a particular identity. The identity-foreclosure status refers to people who have made a commitment to an identity without first exploring their choices. The identity-moratorium status refers to people who are attempting to build an identity but have not yet made any commitments. Finally, the identity-achievement status refers to the status of people who have made a commitment after exploration (Marica, 1987). Each identity status reflects a certain point in a young person's identity development and commitment to the values, ideas, and aspirations that contribute to their identity (Marica, 1987). Though the multiple identity statuses appear to flow one into the next in certain ways, there is no guarantee that a youth's identity status will remain consistent throughout their development or that every adolescent will go through and experience all four (Marica, 1987). Most people eventually acquire a solid identity; however, the journey is not always smooth as there are several paths to choose. Some may take the first position that comes their way, potentially at the price of exploring other, more promising options, while others may spend years experimenting on many personas before settling on one (Marica, 1980). College

students gain the most in terms of identity development as they are exposed to a wider range of employment options, lifestyles, and views, which is likely to prompt identity questions (Marica, 1980). Most people eventually combine the many options into a single self-concept and a secure sense of identity, known as the identity-achievement status. Furthermore, the way one handles an "identity crisis" or identity building experience has ramifications for one's developmental path (Erikson (1968)).

Furthermore, an expansion of Marcia's exploration and commitment model, a dual-cycle model of identity development, was created by Luyckx, Goossens, Soenens, Beyers, and Vansteenkiste (2005). They have precisely described the processes of exploration and commitment, in addition to considering the aspects of commitment, formation, and evaluation, which play an important role in individual stages of identity shaping (Luyckx et al., 2008). The initial version of the dual-cycle model of identity development assumed that identity formation took place in two cycles, each with four processes (Luyckx et al., 2008). The authors established the Dimensions of Identity Development Scale to assess the five identity dimensions in regard to total future objectives (DIDS; Luyckx et al., 2008). The DIDS is a concise and accurate self-report scale that measures commitment making, identification with commitment, exploration in breadth, exploration in depth, and ruminative exploration in the domain of general future plans (Luyckx et al., 2008). The degree to which adolescents search for different options with respect to their goals, values, and beliefs before making commitments was defined as exploration in breadth. An in-depth evaluation of one's existing commitments and choices to determine the degree to which these commitments resemble the individual's internal standards is referred to as exploration in depth. The degree to which adolescents have made decisions about important

identity-relevant issues was defined as commitment making. The degree to which adolescents feel certain about, can identify with, and internalize their choices is referred to as identification with commitment. Lastly, ruminative exploration is the degree to which adolescents who engage in rumination as a form of exploration remain in a state of uncertainty without making any progress toward finding answers to their identity questions. The integrated process-oriented model of identity development proposed by Luyckx et al. (2008) is an intriguing and complicated concept for identity. The DIDS will be used as a method of identity assessment in this study.

#### *Narratives as a Process of Identity Development*

Identity development happens in many ways and through many processes. Retelling the stories of our lives, the significant experiences that shape us as individuals, is a major process of identity development. Bruner (1991) states that the act of constructing a narrative is considerably more than just selecting events either from real life, from memory, or from fantasy and then placing them in an appropriate order. We also organize our experiences and our memory of events mainly in the form of narrative stories, excuses, myths, reasons for doing and not doing, and so on (Bruner,1991). The culturally formed cognitive and linguistic systems that direct life story self-telling have the potential to frame perceptual experiences, structure memory, segment, and purpose-build the very "events" of a life. (Bruner,1991).

The nature of identity formation can be better understood by asking participants to tell narratives of significant life experiences (Gallaher et al., 2017; McLean et al., 2016). Individuals' subjective interpretations of their own experiences, as well as the stories they tell about them, are

emphasized in this narrative approach (McAdams, 1993). Narrative descriptions give insights into personal perceptions of experiences that questionnaire measurements alone cannot supply (Alias & Pratt, 2012). A narrative isn't only a research approach; it's also a way of thinking that people use to make sense of themselves and their lives (Bruner, 1990), and to gain a fuller picture of identity formation.

One of the central principles of narrative identity research is that the influence of experiences on people's identity formation is dependent not only on what occurs to them, but also on how they interpret events in the story (McLean & Thorne, 2003; Pasupathi, Mansour, & Brubaker, 2007). Being able to organize the events of a highly significant experience into narrative form allows an individual to elaborate on, process and make sense of the events that have occurred, and understand how these events are connected to their past, present and future selves, eventually leading to a more coherent sense of self (Fivush & Graci, 2017), a more stable identity (McLean & Pratt, 2006), and being more in control of thoughts and emotions associated with the experience (Pennebaker & Seagal, 1999). Furthermore, highly significant traumatic experiences disrupt an individual's sense of time because they put an individual into a state of shock, causing them to rethink or overthink their life, future, and being, which ultimately disrupts their identity development (Good, 1992). Because the pandemic marked a significant disruption in the typical life story of adolescents and emerging adults, and because life story narratives are formed based on what an individual thinks of as important from their perspective of telling a life story (Berntsen & Bohn, 2009), I expect that it would have an effect on the identity development of these individuals.

### *Meaning-making in Identity Narratives*

One important method through which narrative identity develops appears to be meaning-making. (McAdams, 1993, 1996; McLean, Pasupathi, & Pals, 2007). Meaning-making entails taking a step back from a significant experience to consider the consequences for future behavior, objectives, values, and self-awareness (Pillemer, 1992). Through meaning-making, we are able to distinguish growing connections between the past and the present by analyzing not just what was recalled, but also the wider lessons and insights that developed from the recollections. These meaningful connections provide people a sense of meaning in life, and they form the foundation of psychological identity (Habermas & Bluck, 2000; McAdams, 1988).

Healthy meaning making is defined as self-growth, in a study conducted by Lilgendahl et al., (2013) to examine the factors that shape the meaning making process, with a specific focus on distinguishing between healthy and unhealthy ways of connecting negative memories to self. Unhealthy meaning making was defined as viewing the self as damaged in traumas and as a bad person in transgressions. A total of eighty-five adult participants completed personality and memory telling surveys (retrospective reports of the extent to which memories were shared with others), as well as a story of a trauma and a transgression that was coded for particular types of meaning making (Lilgendahl et al., 2013). A traumatic experience was defined as one that causes significant distress, whereas a transgression was defined as one that involves defying one's moral code (Lilgendahl et al., 2013). It was discovered that trauma and transgression memories had different patterns of associations (Lilgendahl et al., 2013). The results revealed that self-growth in traumas was linked to self-growth in transgressions, and that damaged self in traumas was linked to bad self in transgressions. Unhealthy meaning making was connected with a view that

personality is permanent and with the bad self in transgression narratives. Unhealthy meaning making was also associated with considering the self as damaged by traumas among younger people more than older adults. Those who had come to see previous traumas as favorably transforming of the self were both emotionally stable and felt that their personality may change for the better through their own efforts. The authors concluded that people could create different types of meaning from highly significant experiences, depending on if the experience was good or bad.

Two approaches to identity formation, the identity status model, and the narrative life story model, were investigated in research by McLean and Pratt (2006) in the turning point narratives of teenagers when they were 17 years, 19 years, and 23 years old. Turning points are episodes in which someone undergoes a substantial change (e.g., McAdams, 1993). Turning point narratives are usually events in which one understands something new about oneself or faces decisions about different paths to take in life such as a person realizing something through an experience that leads to a major career change, a turning point in their life (McLean & Pratt 2006). Participants in McLean and Pratt (2006) were asked to write about an important transition or change with respect to their understanding of themselves. Findings revealed that meaning in turning point stories at the age of 23 years was negatively correlated with identity foreclosure at the age of 17 years but was unexpectedly unrelated to diffusion or achievement at the age of 17 years. Meaning-making was negatively correlated with diffusion at the age of 23 years, but not with foreclosure or achievement at the age of 19 years. Moratorium at age 19 years was negatively related to meaning at age 23 years. Meaning was negatively correlated with diffusion and foreclosure at the age of 23 years, but surprisingly not with achievement. At age 23 years,

the identity maturity index was positively associated with meaning (McLean & Pratt 2006). This study revealed that in personal turning point stories, those who scored low on identity exploration tended to create less narrative meaning while those who scored high on identity exploration tended to create richer meaning making in their narratives (McLean & Pratt 2006). The lack of narrative meaning from lower identity statuses was shown to be more significant than its presence at higher statuses. Identity exploration, diffusion, and foreclosure statuses were all found to be negatively related to story meaning. (McLean & Pratt 2006).

Moreover, Fivush and Grace (2017) stated in another study that creating meaning from events in one's life, and the manner in which one does so, has significant consequences for one's identity and well-being, and is a fundamental developmental process. It was noted that narrative meaning-making is made up of a collection of developmental talents and capacities, with different types of meaning creation being possible at different stages of development. Days, weeks, months, and years following an experience, narrative meaning-making develops in varied ways, and this event processing occurs in the context of continuing developmental change. In a complex, reciprocal system, narrating life events both reflects and develops modalities of meaning-making.

Due to the relevance and importance of meaning-making to identity development, in this study, we adapted the meaning-making coding scheme to capture resolution in Covid-19 narratives as it relates to identity development

### *Elaboration in Identity Narratives*

In addition to meaning-making, elaboration appears to be an important element of identity narratives. Elaboration in narratives is important because it allows participants to evaluate their experiences and the significance it holds in their lives. More detailed narratives allow for more evaluation of the event, understanding of the emotional experience, and thus more growth in identity.

Fivush and Zaman (2011) investigated how narratives about adolescent's parents may aid the adolescent in navigating their own experiences. Middle-class two-parent households ( $N=65$ ) with an adolescent in either the eighth or tenth grade were recruited through local institutions. One of eight female study assistants had visited families in their homes. Adolescents were invited to tell personal experiences and stories about each parent's childhood without the parent in close proximity. Each adolescent was asked to tell two stories about their mother and two stories about their father. Adolescents were also asked to tell two positive personal narratives. Three theoretically derived narrative aspects were investigated using coding schemes: differences in narrative structure (length and elaboration), differences in narrative overall theme (affiliation and achievement), and differences in narrative internal state content. The authors discovered that adolescent girls told much longer narratives than boys, as well as narratives that were more elaborated. Girls who used more emotional and cognitive aspects to tell longer, more intricate tales about themselves produced equally extended, elaborative, and internal state saturated stories about their moms but not about their dads. Since girls' narratives were longer, more intricate, and emotionally richer than boys' when they told stories about the identical sorts of events, this indicated that adolescent girls and boys view the world and frame their

experiences in quite diverse ways. These findings show that these gender characteristics continue into adolescence, when forming an adult identity and navigating various societal responsibilities become important concerns. As adolescents attempt to identify themselves, the manner in which they previously co-constructed gendered narratives of early childhood experiences with their parents may help define their distinctive gendered orientation to the world. Individual life stories may impact how they build and comprehend their own growing narrative identity, particularly in adolescence, when individuals become more able to grasp and reflect on the experiences of others in connection to their own experiences.

#### *Coping with Trauma in Identity Narratives*

When a person experiences an event that is highly significant or highly traumatic in nature, it can have consequences for identity development that stem from their overall psychological well-being while processing these experiences. The emotional effects of job loss were addressed in a study conducted by Pennebaker and colleagues (1994). The participants in the research were 63 professionals with an average age of 54 years and a 20-year employment with their previous job, a big computer and electronics company. Following a large-scale layoff from their workplace, they were voluntarily recruited to the Writing in Transition Project by Drake Beam Morin, Inc., an outplacement agency. All individuals had been unemployed for five months at the time of the research. The individuals were randomly allocated to one of two writing conditions: experimental or control. Participants were asked to write about their deepest thoughts and feelings concerning the layoff, as well as how it had affected their personal and professional life. The writing control participants, also known as the nontrauma group, were

asked to write about their daily plans and job search activities. The trauma group was advised to dig deep into their emotions, while the nontrauma group was told to describe their plans and avoid revealing their ideas or sentiments about their circumstances. The findings confirmed that respondents who wrote about job loss trauma were much more likely than control subjects to obtain work in the months following the research. These findings highlight the need for people to deal with the psychological aspects of job loss in order to accomplish their ultimate objective of reemployment. The findings showed that writing about one's thoughts and feelings about losing a job might help terminated employees work through their negative sentiments, internalize, and close the loss, and get a fresh perspective. This may cause a shift in the individual's orientation, allowing them to get over their negative feelings and prevent them from damaging their job search in situations like job interviews. In an outplacement situation, the coping strategy of emotionally disclosive writing is an intervention that can effectively satisfy this need. This study allowed us to conclude that writing about negative feelings or negative experiences can contribute to better well-being by expressing those feelings which can lead to a better coping strategy. Allowing one to express negative thoughts through writing can contribute to resolving unwanted feelings and could lead to coping with the event and the negativity it may have caused on one's life.

In his research, Pennebaker (2004) describes that emotional writing can help to decrease the impact of trauma-related thinking. When writing about an emotionally intense incident, people are frequently obliged to categorize, arrange, and organize it in ways they have never done before. People are likely to think less about their traumas in the weeks following writing and may dedicate their thoughts to other matters in their life. People are forced to reflect about

their emotional upheavals and their life in general as a result of the writing. It alters their perceptions of events in the short and long term. These alterations cause social and emotional changes, which have an impact on cognitive changes as well.

Furthermore, Pennebaker (1999) argues that forming a story about one's experiences in life is associated with improved physical and mental health across a variety of populations. When individuals write or talk about personally upsetting experiences in narrative form, consistent and significant health improvements are found. Current evidence points to the value of having a coherent, organized narrative as a way to give meaning to an event and manage the emotions associated with it. People tend to seek out meaning in their environment, although sometimes this is more difficult in some situations and for some people. Ironically, then, good narratives can be beneficial in making our complex experiences simpler and more understandable but, at the same time, they distort our recollection of them. Translating distress into language ultimately allows us to forget or move beyond the experience. Regardless of how narratives get formed, they serve a critical function in people's lives that have important implications for health and general well-being. The coping strategies in narratives of highly significant experiences for emerging adults may play a role in identity development because in dealing with the trauma through writing, individuals come to terms with their experiences and the place for those experiences in their life story.

### *The Current Study*

Given that past research establishes the importance of narrative processing of negative experiences for identity development, in this study, emerging adult college students provided

narratives of their COVID-19 pandemic experiences. We collected narratives that gave an insight into the experiences students faced during the COVID-19 pandemic. More specifically the narrative prompts allowed students to describe both their negative and positive experiences and reflect on how these experiences affected them during the height of the pandemic. Students were asked to describe their experiences of being quarantined, how their relationships were affected, difficult or stressful experiences they may have faced, and their coping strategies when facing stress. Participants also completed questionnaires related to identity development, and identity distress. These included the Dimensions of Identity Development Scale (Luyckx et al., 2008), and the Identity Distress Survey (Berman, Montgomery, & Kurtines, 2004), which measures the degree of distress that an individual feels over certain issues in their life. Narratives were coded for: 1) elaboration, based on their level of detail and depth, 2) resolution, adapted from McLean and Pratt's (2006) meaning making scale, which measures whether participants resolve the difficulty faced in the narrative, 3) level and type of stress expressed by participants in their narratives, and 4) level and type of coping = employed in the narratives. Through this coding, I aimed to look at the connection to identity and self-esteem. The management of difficult life events by creating meaning from them and resolving the difficulty within those events is important in the development of a healthy narrative identity (McLean & Pratt, 2006). I hypothesized that more elaborative narratives with greater resolution would be related to a more developed identity on the Dimensions of Identity Development Scale, and less identity distress on the Identity Distress Survey. I also hypothesized that narratives with better coping and less reported stress would be related to better identity development on the Dimensions of Identity Development Scale and less identity distress on the Identity Distress Survey.

## METHODS

This study was part of a larger study on Covid-19 experiences, well-being, identity development and personality variables. Only the participants and procedures relevant to this thesis will be discussed.

### *Participants*

Two-hundred twenty emerging adult students, both males and females, were recruited from the University of Central Florida. This is a cross-sectional, correlational study, approved by the UCF IRB. All personal identifying information was removed from the data, and only randomly generated ID numbers from 1 to 220 were associated with participants' data. Of the data given, 58.18% of the participant were female, 40 % were male and 1.82% were not specified. 91.36% were between the ages of 18-23, 5%, were between the ages of 24-29, 0.09 % were between the ages of 30-35, and 1.81 % were not specified. In regard to the participants' ethnicity/race, 6.81 % were Asian, 8.18 % were Black, 20% were Hispanic, 54.09 % were White/Caucasian, 7.27% were two or more races, and 2.27 % were not specified. In regard to employment status, 5.45 % worked full-time, 1.81% were on-call, 27.72 % worked part-time, 64.09 % were unemployed, and 0.93% were unspecified. All participants spoke English fluently.

### *Procedure*

Participants were recruited through Sona, the UCF Psychology Department's data collection online recruiting platform. Those who chose not to participate were offered the opportunity to participate in other studies, or alternative course work of equal effort and time in

order for them to receive an equal amount of course credit. The study was conducted on Qualtrics. Participants provided nine narratives of their COVID-19 pandemic experiences, including how their relationships were affected, life events that occurred, and their coping skills during the pandemic. Participants also completed questionnaires related to identity development, identity distress and self-esteem. Participants received course credit for their participation.

### *Measures*

*The Dimensions of Identity Development Scale.* The Dimensions of Identity Development Scale (Luyckx et al., 2008) is a 25-item measure that assesses five aspects of identity development: commitment making, exploration in breadth, ruminative exploration, identification with commitment, and exploration in depth. The measure is scored on a 1 to 5-point Likert type rating scale, with 1 being strongly disagree and 5 being strongly agree. A sample question includes: “It is hard for me to stop thinking about the direction I want to follow in my life.” Internal consistency coefficients (commitment making 0.88, identification with commitment 0.87, exploration in breadth 0.84, exploration in depth 0.78, ruminative exploration 0.79) showed that the Dimensions of Identity Development Scale is reliable.

*The Identity Distress Survey.* The Identity Distress Survey (Berman et al., 2004) is a ten-item scale that measures identity distress. Participants rate on a 5-point scale (Not at all, Mildly, Moderately, Severely, Very Severely) the degree to which they have been recently upset, distressed, or worried over the following identity issues: long-term goals, career choice, friendships, sexual orientation and behavior, religion, values and beliefs, and group loyalties. It

also includes an assessment of how long participants have been experiencing distress over these issues and to what degree the symptoms are interfering with daily functioning. A sample question includes: “To what degree have you recently been upset, distressed, or worried over any of the following issues in your life.” Internal consistency has been reported as  $\alpha = .84$  with test-retest reliability of  $\alpha = .82$ , and the survey has demonstrated convergent validity with other measures of identity development (Berman et al., 2004). Only the first seven items of the Identity Distress Survey were used to compute the identity distress score.

*Narratives of COVID-19 Experiences Questionnaire.* Participants were asked to describe their COVID-19 experiences and how they coped with the quarantine process as a result of the pandemic using a series of 9 narrative prompts developed by the principle investigator and co-investigators of this study. See Appendix 1 for Narrative Questionnaire.

#### *Description of Narrative Coding*

For each coding scheme, reliability was established with another member from the larger study. In all cases, the two researchers trained on 10% of the narratives, and established reliability on a separate 10% of the narratives. Reliability was established once the two coders individually agreed on a score at least 75% of the time. Once reliability was established, each coder coded equal numbers of the remaining narratives.

*Coding of Resolution.* The resolution coding scheme is adapted from McLean and Pratt’s (2006) meaning making coding scheme for turning point narratives. Covid-19 narratives are

coded on a 0- to 3-point scale. This coding scheme focuses on reflecting on the meaning of the event; reflecting on why something may have happened or why the participant felt a certain way. Intra-class correlation between the two coders for Resolution was  $a = .85$ . Refer to Table 1 for a detailed description of the Resolution coding. A code of 0 is given to factual narratives with no reflection. A code of 1 is given to narratives with a reflection that ends with a negative connection to the self. In other words, identifying a problem due to the event but not resolving it. That problem is most likely related to a negative realization about the self. The problem is described in very negative ways, and there is no attempt to resolve it. A score of 2 is given to narratives in which there was reflection that ends with a vague meaning of the event. The participant learns something but in a vague, general way. It could also be a realization of a general world view or a change in perspective of how the world works, such as learning something about people or the world or the self in general. Lastly, a score of 3 is given to narratives in which there is reflection with steps to resolve the problem, ending with insight about the self. The participant delves deep into the meaning of the experience and had made an insightful realization/insight about the self. If there is a conflict mentioned, there is also a resolution to do something positive. When a resolution is reached, the participant describes the process of arriving at that positive resolution.

*Coding of Elaboration.* The Covid-19 elaboration coding is designed to capture the level of details present in the narrative and was coded on a 0 to 4-point scale. Intra-class correlation between the two coders was  $a = 0.93$ . Refer to Table 2 for a detailed description of the Elaboration coding. A score of 4 is given to a highly elaborate and detailed narrative of the

experience. The story is well embellished and contains relevant details concerning the characters and events for each story (e.g., feelings, thoughts, actions, solutions, etc.). Details include several different aspects and layers of the plot (e.g., several solutions to the situation) and the description is very vivid and relevant to the original information provided. A score of 3 is a generally detailed story, but the story is somewhat spacious. The level of elaboration is sufficient and satisfactory and most of the story included a diversity of details, and the descriptions are vivid and relevant. Yet, there are parts of the story that are relatively less elaborated compared to other parts of the story, and there is only reference to other, non-suggested characters as elaborate stories often contain other characters. A score of 2 is given to a narrative low elaboration, a generally constricted story. Most of the story is characterized by restricted elaboration and details. The story is mostly flat and mostly confined to the question prompt. Yet, there are 1 or 2 moments in which the story is relatively more elaborated compared to other parts. For example, 1 or 2 additional details regarding the original information is added. A score of 1 is given to a narrative with no elaboration, which is a narrow and flat story. The story is shallow and superficial, and lacking in details. One piece of information is mentioned but there are no details surrounding that information. This score is also assigned to an abundance of details (e.g., a laundry list of items) that do not contribute to the construction of a coherent story. Lastly, a 0 is given when there is no story provided at all. The participant does not answer the question at all, or the participant answers the question in a such a way that no details follow and there is no reflection on trying to answer the question.

*Coding Level and Type of Stress.* Narratives are coded on a scale of 0 to 3 for level of stress. Intra-class correlation between the two coders was  $a = .77$ . Refer to Table 3 for a detailed description of the Stress coding. A score of 3 is identified as high stress where the participant describes feeling extremely or very stressed, experiencing severe anxiety, or a large source of frustration in their lives. The participant describes a specific event or situation that is causing them a great deal of stress in their lives and causing them to feel frustrated or anxious and has not found a way to resolve that stress. A score of 2 is identified as medium stress where the participant describes feeling somewhat stressed or the participant describes feeling stressed for a short period of time and then perhaps overcame that stress. The participant describes a stressful experience but has indicated that the situation has calmed down towards the end and they have overcome the high stress of the situation. A score of 1 is identified as low stress where the participant describes feeling little stress or low stress, and that nothing super stressful has happened to them. The participant has not mentioned feeling any sort of frustration or anxiety in their lives due to any type of stressful event or situation. Lastly, a score of zero is given when the participant describes feeling no stress at all.

Narratives were further categorized based on type of stress experienced by participants. The stress categories are financial stress, social stress, emotional stress, academic stress, and health stress. Financial stress is when the participant discussed feeling stressed due to finances specifically, job loss or unemployment, or anything in relation to a financial struggle. Social stress is when the participant discusses stress due to friends, relationships, family members, or anyone that is causing a significant stress in the participants narrative. Emotional stress is when the participant discusses feeling a specific negative emotion such as anxious or depressed..

Academic stress is when the participant discusses feeling stressed due to academic struggle, classes, grades, or anything in relation to schoolwork. Lastly, health stress is when the participant describes feeling stressed due to a health-related issue, whether their own health related issue, or someone close to them.

*Coding for Coping.* Narratives were coded on a scale of 0 to 3 for level of coping. Intra-class correlation between the two coders was  $r = .82$ , Refer to Table 4 for a detailed description of Coping level. A score of 3 is identified as positive coping, where the participant identifies a strategy or multiple strategies that give rise to a productive and positive mindset during the pandemic that have led to positive outcomes and improvements in their life. It could be where the participant mentions specific strategies for coping with stress during the pandemic and they engage in a specific strategy that works best for them. A score of 2 is given when the participant is moving towards or progressing towards better coping, but they are not quite at that point yet. They might mention that they are trying multiple strategies in order to get better, but they have not found a coping strategy that works best for them. A score of 1 is given when the participant mentions a negative coping strategy. It is a coping strategy that may be destructive or counterproductive to them and can produce negative outcomes in their life. Lastly, a score of 0 is given when there is no coping method mentioned at all.

Narratives were categorized based on the type of coping strategy mentioned. The coping categories were problem-focused coping, emotion-focused coping, and social-focused coping. Problem-focused coping is when the participant took active steps to resolve the problem itself, even if the steps were not proven to be effective. Emotion-focused coping is when the

participant's coping is focused on fixing their feelings about the problem, and making themselves feel better, but yet does not tackle the problem itself. Lastly, social-focused coping is when the participant connects with others to feel better and take their mind off the problem.

## RESULTS

This project is part of a larger study. Only the hypotheses relevant to this project are analyzed below. The results are organized according to 1) correlational analyses between the narrative variables and identity questionnaires, and 2) ANOVAs examining group differences in type of coping mechanism and identity variables.

### *Gender Differences in Narrative Variables*

Preliminary analyses were conducted to explore demographic differences on narrative variables. An independent samples *t*-test was used to determine if there was a significant mean difference between males and females on narrative elaboration, resolution, coping, and stress in their narratives. Results revealed there was a significant difference in elaboration ( $t(1, 204) = 2.48; p = .014$ ) such that females were slightly more elaborative than males ( $M$  for males = 1.59,  $SD = .64$ ;  $M$  for females = 1.83,  $SD = .70$ ). There was also a significant difference in the expression of stress ( $t(1, 204) = 2.16, p = .032$ ), such that females expressed slightly more stress than males in their narratives ( $M$  for males = 2.42,  $SD = .93$ ;  $M$  for females = 2.67,  $SD = .66$ ). The same trend was found for coping, such that females expressed higher attempts at coping than males ( $t(1, 204) = 2.30, p = .0230$ );  $M$  for males = 1.92,  $SD = 1.17$ ;  $M$  for females = 2.27,  $SD = 1.00$ . There was no significant difference in resolution between males and females.

### *Correlational Analyses Between Narrative Variables and Identity*

Hypothesis 1: More elaborative narratives with greater resolution would be related to better identity development and less identity distress.

To examine the correlations between elaboration, resolution and identity, a Pearson's Bivariate correlation was performed with average elaboration across 9 narratives, average resolution across 9 narratives, the 5 scales of the DIDs and the IDS. There were no significant correlations between the narrative variables and the DIDs or the IDS. There was, however, significant correlations between narrative elaboration and resolution ( $r = .37, p < .001$ ), suggesting that participants who told more detailed stories about their Covid-19 experiences created more insightful meaning in their narratives.

There were also significant correlations between the IDS and some of the DIDs subscales, as follows: ruminative ( $r = .36, p < .001$ ), meaning that those high in identity stress were also more likely to ruminate; identification with commitment ( $r = -.22, p = .001$ ), meaning that those with weaker identity commitments were more likely to be distressed; and exploration in depth ( $r = .17, p = .011$ ), meaning that those with stronger depth on their choices or commitments were more likely to be high in identity distress. The correlations between the IDS and the communication and exploration subscales of the DIDs were not significant.

Hypothesis 2: Better coping and less reported stress would be related to better identity development and less identity distress.

We ran a series of Pearson's Bivariate correlations with coping rating scale, stress rating scale, the DIDs and the IDS to examine this hypothesis. There were no significant correlations between coping rating scale and the DIDS scales nor the IDS. Similarly, there were no significant correlations between the stress rating scale and the DIDS scales. However, there was a significantly positive correlation between the stress rating scale and the IDS degree of distress

( $r = .14, p = .046$ ), meaning that greater stress expressed in the narratives was related to higher levels of identity distress. Length of time in distress ( $r = .112, p = .099077$ ), did not reach a level of significance but it did come close meaning participants who were in distress for a significant length of time experienced more stress. Additionally, the coping and stress rating scale were positively correlated ( $r = .180, p = .007718$ ), such that participants who express more stress expressed in their Covid-19 narratives also indicated higher levels of coping in their narratives.

### *Categorical Analyses on The Type of Stress and Coping in Relation to Identity Development and Identity Distress*

*Exploratory Analysis 1: Which type of stress is more associated with better identity development on the DIDs and less identity distress on the IDS?*

To examine the type of stress that is more associated with better identity development and less identity distress, a 4 X 6 Multivariate ANOVA with type of stress (Financial stress, Relationship stress, Emotional stress, or Academic stress) as the independent variable, and the 5 subscales of the DIDs, and the Identity Distress Scale as dependent variables was performed. Those who scored higher on the Identity Distress Scale report higher emotional stress compared to any other kind of stress  $F(8, 207) = 2.413, p = 0.016$ . A follow-up Tukey HSD showed that emotional stress was significantly higher than all other stress variables ( $p$ -values ranged from .001 to .089). See Table 5 for the means and standard deviations of identity distress for each type of stress. There were no significant differences on the DIDS subscales when comparing different types of stress.

*Exploratory Analysis 2: Which type of coping is more associated with higher identity development on the DIDS and less identity distress on the IDS.*

To examine this question, a 3 X 6 Multivariate ANOVA was performed. The type of coping (Problem-focused coping, Emotion-focused coping, or Social-focused coping) was the fixed factor, and the five subscales of the DIDs, and identity distress were the dependent variables. The  $p$ -values were adjusted using Bonferroni corrections to account for the large number of independent analyses on the dependent variables. Results indicated that those who used problem focused coping compared to social and emotion focused coping scored higher on the DIDS Exploration in breadth subscale  $F(8,207) = 2.76, p = .006$ . Results also indicated a significant difference between problem focused and emotion focused coping on the DIDs subscale of rumination ( $F(8,207) = 2.612, p = .009$ ), such that those who used more problem focused coping compared to emotion focused coping had higher rumination scores. There was also a significant difference for the identification with commitment subscale ( $F(8, 207) = 2.95, p = 0.004$ ), such that those who used emotion focused coping had higher identification scores than those who used problem or social focused coping. See Table 6 for all means and standard deviations related to the three coping categories with the DIDs subscales. There were no differences in identity distress depending on type of coping mechanism used.

## **DISCUSSION**

The purpose of this study was to examine the narratives related to the Covid-19 pandemic in relation to identity development in a sample of emerging adults. We hypothesized that those with greater elaboration and resolution, better coping, and less stress in their narratives of their Covid-19 experiences would show greater identity development and less identity distress. In general, our results did not support our hypothesis, but other interesting results emerged from exploratory analyses examining the type of stress and coping in relation to identity development.

The preliminary analysis was that females would be higher in all narrative devices (elaboration, resolution, coping and stress) compared to males. The results showed there was a significant difference in elaboration but not for resolution. Females were significantly more expressive and detailed in their Covid-19 narratives compared to males, and this is supported by previous research (Andrews et al., 2015). Females express their emotions in a more elaborative manner when discussing negative situations or experiences, and generally are more descriptive of their personal experiences. Males are more likely to form short and simple responses when expressing their emotions about traumatic situations or experiences (Andrews et al., 2015).

There was also a significant difference in the expression of stress and coping, both of which were higher for females than males. Because females express their emotions in more detail in personal stories, they are therefore more likely to describe feelings of stress, and dwell on those feelings of stress (Graneist et al., 2015). If in fact they are experiencing more stress than males, then that would explain why they are also expressing more coping devices.

The first hypothesis was that more elaborative narratives with greater resolution would be related to better identity development and less identity distress. There were no significant correlations between the narrative variables and the DIDs nor the IDS. It is possible that because the pandemic was still raging during the time of this data collection, participants were still actively processing their experiences.

There was, however, significant correlations between narrative elaboration and resolution, such that those who were more elaborate also expressed more resolution in their narratives. Resolution captured that the participant had found a deep meaning into the traumatic experience and reached an insightful resolution. Therefore, it may be that the more expressive you are in your narrative, the more you are able to reflect on those experiences and come to terms with them. Perhaps more narrative time (elaboration) allows for greater positive resolutions and self-connections.

There were also significant correlations between the IDS and the ruminative, identification, and exploration in depth subscales of the DIDs. Rumination and exploration in depth were positively correlated with the IDS, indicating that those with higher identity distress were more ruminative and followed negative thought patterns. This would mean that those who ruminate more, that is, they spend more time rehearsing experiences in their heads without ever coming to a conclusion, have greater identity distress. And similarly, those with greater identification had less identity distress as the IDS was negatively related to identification with commitment.

The second hypothesis was that better coping and less reported stress would be related to better identity development and less identity distress. The results showed there were no

significant correlations between coping rating scale and the DIDS nor IDS. Similarly, there were no significant correlations between the stress rating scale and the DIDs. However, there was a significantly positive correlations between the stress rating scale and the IDS degree of distress as well as a marginally significant correlation with length of time in distress. This indicates that experiencing more stress through a traumatic event correlates with identity distress. Experiencing stress through a traumatic event tie into one's goals, friendships, relationships, values etc. When experiencing high stress or experiencing more stress than usual, the aspects of one's life come into question leading to one feeling distressed with their identity, their place in the world.

Additionally, the coping and stress rating scale were positively correlated, such that more stress expressed in narratives indicated higher levels of coping. Further, we found that emotional stress was the highest level of stress reported in the narratives compared to any other type of stress. These results lead us to conclude that the pandemic was especially stressful emotionally due to the effect a traumatic event can have on an individual. When going through a traumatic event, especially one that takes a toll on all the aspects of one's life, it has ability to affect one's physical and mental health. Many individuals have strong feelings about the traumatic experience they are going through and may have difficulty regulating those unfamiliar emotions. Traumatic experiences can cause the individual to fall into a state of shock and even rethink their life or future which can disrupt their identity development causing them to experience high emotional stress (Good, 1992). When discussing the stress and the type of stress that the participant has experienced through the pandemic, they often emphasized their emotions and how the stressful event affected them. The results also indicated that those who were

experiencing higher levels of stress were also trying harder to cope. They expressed more positive coping in their narratives and detailed more coping strategies.

Furthermore, the first exploratory analysis described which type of stress is more associated with better identity development on the DIDS and less identity distress on the IDS. While there were no significant differences on the DIDS subscales when comparing different types of stress, those who experienced emotional stress had significantly higher identity distress than those who experienced any other stress type.. This suggests that identity distress was experienced during high emotional stress might be due to the mental toll it could have taken on the individual and how the overall traumatic experience affected the individual's mental health.

Lastly, the second exploratory analysis suggested which type of coping is more associated with higher identity development on the DIDS and less identity distress on the IDS. The results indicated that there was significantly lower problem focused coping compared to social and emotion focused coping for those who scored higher on the DIDS Exploration subscale, significantly more problem focused coping compared to emotion focused coping on the Rumination subscale, and more emotion focused and less problem focused coping on the Identification subscale. These results indicate that those who used problem focused coping seem to explore less compared to those who use social or emotion focused coping, those who utilized more problem focused coping as opposed to emotion focused coping ruminate more, and those who engages in more emotion focused coping compared to problem focused coping had higher identity development in terms of identification. These results seem to point to the usefulness of social and emotional coping over problem-focused coping in identity development, at least in the middle of a pandemic. In other words, turning to others for help as a coping strategy, and dealing

with one's emotions directly correlate with better identity development because they may reflect the most one can do to cope while in the middle of a traumatic experience, as opposed to tackling the problem head on, which may not work in the middle of an ongoing pandemic.

### *Limitations and Future Directions*

There are several limitations of the study. The first limitation is that the study is correlational and not an experimental study. Therefore, we cannot interpret any of these results as causal, but instead only as relational.

The second limitation of the study is in regard to when the data was collected. When the data was initially collected, the COVID-19 pandemic was at its height and the virus was initially at its worst. There was no vaccine developed at the time of data collection, so there was no foreseeable end to the pandemic. Since the data was originally collected two years prior to these analyses, the pandemic has positively shifted and much has changed. Compared to when the data was initially collected, the pandemic is much less severe and much has changed in terms of coping with the pandemic and the COVID-19 virus. Therefore, participants' perspectives in their experiences might have shifted greatly by now. The way people have learned to cope with the pandemic has dramatically changed. There has also been the development of vaccines for the Covid-19 virus which has helped with coping and dealing with the pandemic in a better manner causing individuals to see a foreseeable future. Future research could involve looking at the issue longitudinally. Since the study was anonymous, the participants cannot be revisited but revisiting the original participants two to three years after the data was initially collected or once the pandemic has ended to examine how perspectives have shifted. Comparing and contrasting the

participant's identity development from the height of the COVID-19 pandemic to the foreseeable end of the pandemic allows for the researcher to gain better insight on the effects of this traumatic event on identity development overtime

### *Conclusion*

Overall, the purpose of the study was to research the identity development of individuals going through a worldwide pandemic. This study demonstrated the importance of narrative processing of highly significant, traumatic experiences for continued advancement in identity development in emerging adults. The ability to deeply process and reflect on a traumatic event, and the ability to effectively cope with that experience points to continued identity development throughout and after the event, although there may be a time lag before such changes appear on more objective measures of identity development.

**APPENDIX A: IRB APPROVAL AND LETTER OF CONSENT**



UNIVERSITY OF CENTRAL FLORIDA

**Institutional Review Board**  
 FWA00000351  
 IRB00001138, IRB00012110  
 Office of Research  
 12201 Research Parkway  
 Orlando, FL 32826-3246

**EXEMPTION DETERMINATION**

September 11, 2020

Dear Widaad Zaman:

On 9/11/2020, the IRB determined the following submission to be human subjects research that is exempt from regulation:

Type of Review:	Initial Study
Title:	Narratives of Covid-19 Experiences: Relations to Mental Health, Identity Development and Personality
Investigator:	Widaad Zaman
IRB ID:	STUDY00002131
Funding:	None
Grant ID:	None
Documents Reviewed:	<ul style="list-style-type: none"> <li>• Beck Depression Inventory, Category: Survey / Questionnaire;</li> <li>• Demographics Questionnaire, Category: Survey / Questionnaire;</li> <li>• Dimensions of Identity Development, Category: Survey / Questionnaire;</li> <li>• HRP 254 - Explanation of Research, Category: Consent Form;</li> <li>• Human Research Protocol Form 255 Request for Exemption, Category: IRB Protocol;</li> <li>• Identity Distress Survey, Category: Survey / Questionnaire;</li> <li>• Narrative Questionnaire, Category: Test Instruments;</li> <li>• Perceived Stress Scale, Category: Survey / Questionnaire;</li> <li>• Personality Questionnaire, Category: Survey / Questionnaire;</li> <li>• Psychological Well-being Scale, Category: Survey / Questionnaire;</li> </ul>

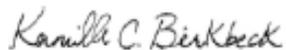
This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made, and there are questions about whether these changes affect the exempt status of the human research, please submit a modification request to the IRB. Guidance on

submitting Modifications and Administrative Check-in are detailed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system. When you have completed your research, please submit a Study Closure request so that IRB records will be accurate.

**Due to current COVID-19 restrictions, in-person research is not permitted to begin unless you are able to follow the COVID-19 Human Subject Research (HSR) Standard Safety Plan with permission from your Dean of Research or submitted your Study-Specific Safety Plan and received IRB and EH&S approval. Be sure to monitor correspondence from the Office of Research, as they will communicate when restrictions are lifted, and all in-person research can resume.**

If you have any questions, please contact the UCF IRB at 407-823-2901 or [irb@ucf.edu](mailto:irb@ucf.edu). Please include your project title and IRB number in all correspondence with this office.

Sincerely,



Kamille Birkbeck  
Designated Reviewer

*Letter of Consent*



**Personality Type and Narratives of Covid-19 Experiences**

**Informed Consent**

Principal Investigator(s): *Widaad Zaman, Ph.D.*

Co-Investigator(s): *Anh Pham  
Jullianna Stalbaum  
Lewis Rincon Castano*

Faculty Supervisor: *Widaad Zaman, Ph.D.*

Sponsor: *University of Central Florida*

Investigational Site(s): *University of Central Florida, Department of Psychology.*

**Introduction:** Researchers at the University of Central Florida (UCF) study many topics. To do this we need the help of people who agree to take part in research. You are being invited to take part in a research study at UCF. You are being asked to take part in this study because you are a student at UCF. You must be 18 years or older to participate in this study.

**What you should know about a research study:**

- You will read the instructions in order to complete the study
- A research study is something you volunteer for.
- Whether or not you take part is up to you.
- You should take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide, it will not be held against you.
- Feel free to ask all the questions you want before you decide.
  
- **Purpose of the study:** The purpose of this study is to examine the narratives of Covid-19 experiences in relation to different personality types, identity development, and psychological well-being.

**What you will be asked to do in this study:**

- Complete several anonymous questionnaires.
- It will take you about one hour to complete this study.
- This is a one-time only study; no follow-up participation is required
- Please answer every question on all questionnaires, so that your data may be useful.

**Location:** Online through Sona and Qualtrix.

**Time required:** 1 hour to 1.5 hours.

**Risks:** There are no reasonably foreseeable risks or discomforts involved in taking part in this study.

**Compensation or payment:** Research credits for your applicable classes, such as General Psychology.

**Anonymous research:** This study is anonymous. That means that no one, not even members of the research team, will know that the information you gave came from you. Each participant will receive a random ID number, which will be associated with your questionnaire data, so that no names are connected to your data.

**Study contact for questions about the study or to report a problem:** If you have questions, concerns, or complaints, or think the research has hurt you, talk to Dr. Widaad Zaman, Department of Psychology, 321-682-4336.

**IRB contact about your rights in the study or to report a complaint:** Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. You may also talk to them for any of the following:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.

## **APPENDIX B: SURVEY INSTRUMENTS**

### *Narrative Questionnaire*

1. Describe your experiences of being quarantined during the Covid-19 pandemic. Discuss your feelings and thoughts, the difficulties that you encountered, and how the quarantine process has affected you both positively and negatively. Give as much detail as possible.

2. Describe one goal that you have since the quarantine began. Goals may be short-term as completing your school homework, or a long-term goal like planning to complete a graduate degree. Tell us why this goal is important and how you are planning to meet this goal.

3. How has the Covid-19 pandemic affected your relationship with your family? Describe your feelings and thoughts, the difficulties that you encountered, and how the pandemic has affected your family relationships both positively and negatively.

4. How has the pandemic affected your relationship with your friends? Describe your feelings and thoughts, the difficulties that you encountered, and how the pandemic has affected your friendships both positively and negatively.

5. How has the pandemic affected your relationship with your partner/significant other? Describe your feelings and thoughts, the difficulties that you encountered, and how the pandemic has affected your romantic relationship both positively and negatively.

6. Describe your most difficult experience during the pandemic. Describe in detail what happened or is happening (including when it happened, your feelings, who was involved).

7. Describe your most recent stressful experience during the pandemic. Give as much detail as possible about that stressful experience (including what happened, when it happened, your feelings, who was involved).

8. Describe how this situation has changed the way you cope with stress. Tell us specifically how you have dealt with increased stress due to the pandemic. Give specific examples of coping strategies that you've used, such as exercising, counseling, working, etc. Give as much detail as possible.

9. Describe how your spirituality/religiosity has been affected during the pandemic. Give examples that demonstrate an increase or decrease in your spirituality/religiosity. Give as much detail as possible.

### *Dimensions of Identity Scale*

Instructions: Please circle the number that is most representative of you for each question (1 = strong disagree, and 5 = strongly agree). Do not select more than one answer.

1 Strongly disagree	2 Disagree	3 Neither disagree / Neither agree	4 Agree	5 Strongly agree	
1. I have decided on the direction I am going to follow in my life.	1	2	3	4	5
2. I have plans for what I am going to do in the future.	1	2	3	4	5
3. I know which direction I am going to follow in my life.	1	2	3	4	5
4. I have an image about what I am going to do in the future.	1	2	3	4	5
5. I have made a choice on what I am going to do with my life.	1	2	3	4	5
6. I think actively about different directions I might take in my life.	1	2	3	4	5
7. I think about different things I might do in the future.	1	2	3	4	5
8. I am considering a number of different lifestyles that might suit me.	1	2	3	4	5
9. I think about different goals that I might pursue.	1	2	3	4	5
10. I am thinking about different lifestyles that might be good for me.	1	2	3	4	5
11. I am doubtful about what I really want to achieve in life.	1	2	3	4	5
12. I worry about what I want to do with my future.	1	2	3	4	5
13. I keep looking for the direction I want to take in my life.	1	2	3	4	5
14. I keep wondering which direction my life has to take.	1	2	3	4	5
15. It is hard for me to stop thinking about the direction I want to follow in my life.	1	2	3	4	5
16. My plans for the future match with my true interests and values.	1	2	3	4	5
17. My future plans give me self-confidence.	1	2	3	4	5
18. Because of my future plans, I feel certain about myself.	1	2	3	4	5
19. I sense that the direction I want to take in my life will really suit me.	1	2	3	4	5
20. I am sure that my plans for the future are the right ones for me.	1	2	3	4	5
21. I think about the future plans I already made.	1	2	3	4	5
22. I talk with other people about my plans for the future.	1	2	3	4	5
23. I think about whether the aims I already have for life really suit me.	1	2	3	4	5
24. I try to find out what other people think about the specific direction I decided to take in my life.	1	2	3	4	5
25. I think about whether my future plans match with what I really want.	1	2	3	4	5

*Identity Distress Survey*

To what degree have you recently been upset, distressed, or worried over any of the following issues in your life? Please select the appropriate response, using the following scale, and write your response in the blank space provided before each question.

None at all	Mildly	Moderately	Severely	Very Severely
1	2	3	4	5

- \_\_\_\_\_ 1. Long term goals? (e.g., finding a good job, being in a romantic relationship, etc.)
- \_\_\_\_\_ 2. Career choice? (e.g., deciding on a trade or profession, etc.)
- \_\_\_\_\_ 3. Friendships? (e.g., experiencing a loss of friends, change in friends, etc.)
- \_\_\_\_\_ 4. Sexual orientation and behavior? (e.g., feeling confused about sexual preferences, intensity of sexual needs, etc.)
- \_\_\_\_\_ 5. Religion? (e.g., stopped believing, changed your belief in God/religion, etc.)
- \_\_\_\_\_ 6. Values or beliefs? (e.g., feeling confused about what is right or wrong, etc.)
- \_\_\_\_\_ 7. Group loyalties? (e.g., belonging to a club, school group, gang, etc.)
- \_\_\_\_\_ 8. Please rate your overall level of *discomfort* (how bad they made you feel) about all the above issues as a whole.
- \_\_\_\_\_ 9. Please rate how much uncertainty over these issues as a whole has interfered with your life (for example, stopped you from doing things you wanted to do, or being happy)
- \_\_\_\_\_ 10. How long (if at all) have you felt upset, distressed, or worried over these issues as a whole? (Use rating scale below)

Never or less than a month	1 to 3 months	3 to 6 months	6 to 12 months	More than 12 months
1	2	3	4	5

## Demographics Questionnaire

(Double-click to delete) To add multiple choice questions to this test, place your cursor where you want to add a question, click the **Insert** tab, click **Quick Parts**, and then click an option. To undo, press **CTRL+Z**.

### Demographics Questionnaire. |

**Instructions: Please answer all questions. Please be honest. Remember that your answers are completely anonymous.**

1) \_\_\_\_\_ **Gender**

- a. Male
- b. Female
- c. Non-specified

2) \_\_\_\_\_ **Age**

- a. 18-23
- b. 24-29
- c. 30-35
- d. Other: \_\_\_\_\_

3. \_\_\_\_\_ **Race**

- a. White/Caucasian
- b. Hispanic
- c. Blacks
- d. Asians
- e. Two or more races
- f. Other: \_\_\_\_\_

4. \_\_\_\_\_ **Employment**

- a. Full time
- b. Part time
- c. On call

(Double-click to delete) To add multiple choice questions to this test, place your cursor where you want to add a question, click the **Insert** tab, click **Quick Parts**, and then click an option. To undo, press **CTRL+Z**.

- d. Unemployed
- e. Disable; cannot work

5. \_\_\_\_\_ **Class standing**

- a. Freshman
- b. Sophomore
- c. Junior
- d. Senior

6. Are you an immigrant to the USA?

- a. Yes
- b. No

7. If you are an immigrant, what generation are you in the USA?

- a. first generation (I migrated myself to the USA)
- b. second generation (my parents migrated to the USA)
- c. third generation (my grandparents migrated to the USA)

8. Marital status:

- a. Single
- b. Involved in a relationship
- c. Married
- d. Divorced
- e. Widowed
- f. Separated
- g. Other: \_\_\_\_\_

## **APPENDIX C: TABLES**

Table 1: Resolution coding

<u>Code</u>	<u>Description</u>
<b>Code 0 – no meaning; only factual</b>	The narrative is factual and there is no meaning or connection to self. A fact is stated but there is no deeper reflection or meaning related to this fact. Stating a fact and then an emotion does not constitute a connection to self or, there is no real answer given to the question prompt
<b>Code 1 – negative connection to the self with no resolution</b>	Identifying a problem due to the event but not resolving it. That problem is most likely related to a negative realization about the self. The problem is described in very negative ways, and there is no attempt to resolve it.
<b>Code 2 – Vague meaning that is neutral in nature</b>	The participant learns something but in a vague, general way. The realization of a general world view or a change in perspective of how the world works. Learning something about people or the world or the self in general.
<b>Code 3 – insight that is generally positive in nature</b>	The person has delved deep into the meaning of the experience and has made an insightful realization/insight about the self. If there is a conflict mentioned, there is a resolution to do something positive. When a resolution is reached, the person describes the process of arriving at that positive resolution.

Table 2: Elaboration Coding

<u>Code</u>	<u>Description</u>
<b>Code 0- No story provided at all.</b>	The participant does not answer the question at all, or the participant answers the question in a such a way that no details follow. There is no reflection on trying to answer the question BUT if the participant answers that the pandemic has not affected them, yet continues with an elaboration of that statement, the narrative can move up to a higher score.
<b>Code 1- No elaboration: Narrow and Flat Story</b>	The story is clearly shallow and superficial, being plain, narrow, and flat detail. One piece of information is mentioned but no details surrounding that information is given. This score is also assigned to an abundance of details (e.g., a laundry list of items) that do not contribute to the construction of a story. A specific event may be mentioned without any additional details or elaboration surrounding that event BUT, if a laundry list is tied together by a unifying theme or a conclusion, then the narrative could receive a higher score.
<b>Code 2- Low elaboration: Generally Constricted Story</b>	Most of the story is characterized by restricted elaboration and details. The story is mostly flat and confined to the mere stimuli (the narrative prompts). Yet, there are 1-2 moments in which the story is relatively more elaborated compared to other parts. For example, 1 or 2 additional details regarding the original information. A 2-narrative might be wordy, but the information presented is very general, vague, broad, or repetitive without too many specific details to clarify it. A 2-narrative might also be a laundry list of items tied together with a unifying theme or conclusion.
<b>Code 3-Good (Satisfactory) Elaboration: Generally detailed Story</b>	The level of elaboration is sufficient and satisfactory. Most of the story includes a diversity of details and the descriptions are vivid and relevant. Yet, there are parts of the story are relatively less elaborated compared to other parts of the story, and there is only reference to other, non-suggested characters. The story is somewhat spacious. This score is also assigned to cases in which the story is more concise at the beginning of the task and then expands in elaboration as the task continues, so that the story unfolds into a more detailed account. A single event might be elaborated upon in such a way that the details are all making the same point
<b>Code 4- Highly Elaborated and Detailed Story</b>	The story is well embellished and contains relevant details concerning the characters and events for each story (e.g., feelings, thoughts, actions, solutions, etc.). Details include several different aspects and layers of the plot (e.g., several solutions to the situation). The description is very vivid and relevant to the original information provided.

Table 3: Stress Coding

<u>Code</u>	<u>Description</u>
<b>Code 0 – No Stress</b>	The participant describes feeling no stress.
<b>Code 1 – Low Stress</b>	The participant describes feeling little stress or low stress, nothing super stressful has happened to me.
<b>Code 2 – Medium Stress</b>	The participant describes feeling somewhat stressed. The participant described feeling stressed for a period of time but has since overcome that stress. The participant describes a stressful experience but does not go on to describe how stressful it was for them. The narrative starts out with a high stress situation, but then things calm down towards the end
<b>Code 3 – High Stress</b>	The participant describes feeling extremely, or very stressed, experiencing severe anxiety, the biggest problem, a large source of stress,

Table 4: Coping Coding

<u>Code</u>	<u>Description</u>
<b>Code 0-No coping mentioned</b>	The participant does not mention any type of coping
<b>Code 1 – Negative coping</b>	A coping strategy that might be destructive or counterproductive to the person that may lead to negative outcomes. E.g.s. crying, lashing out, drinking.
<b>Code 2 – Moving towards or progressing towards better coping, but not quite there yet</b>	The participant mentions that they are trying different strategies or trying to get better but have not found one that works, or the participant mentions that they have developed ways of coping but did not mention any specific strategies. Vague mention of a strategy but no follow-up regarding how effective it has been. E.g., “I have been talking more to my parents about the stress of online classes.”
<b>Code 3 – Positive coping</b>	Identifying a strategy or strategies that give rise to a productive mindset during the pandemic that may lead to positive outcomes and improvements. The participant mentions specific strategies for coping with the stress of the pandemic. E.g.s. working out/exercising. The participant might be engaged in a very specific strategy that works for them, though it may not necessarily work for others, e.g., hypnosis.

*Table 5: Type of Stress Means and Standard Deviations*

<b><u>Stress Category</u></b>	<b><u>Mean</u></b>	<b><u>Standard Deviation</u></b>	<b><u>N</u></b>
<b>Academic</b>	1.9981	.67307	60
<b>Health</b>	2.2351	.64388	43
<b>Social</b>	2.2978	.76694	25
<b>Emotional</b>	2.6347	.78678	33
<b>Financial</b>	2.0719	.85612	17
<b>Relationship</b>	2.0769	.77564	13

Table 6: Type of Coping Means and Standard Deviations

<b><u>Coping Categories</u></b> = <i>M (SD)</i>	<b><u>DIDS Exploration in Breadth</u></b>	<b><u>DIDS Rumination</u></b>	<b><u>DIDS Identification</u></b>
<b>Problem-focused</b>	3.2200 (1.34809)	3.6200 (1.10074)	3.0400 (1.33267)
<b>Social - focused</b>	3.9515 (.72922)	3.1545 (.96639)	3.6879 (1.01625)
<b>Emotion-focused</b>	3.8718 (.80286)	2.8602 (.92454)	3.8505 (.72799)

## **APPENDIX D: SAMPLE NARRATIVES**

*Sample Narratives*

<b>Sample Narratives That Earned High Scores</b>	
<b>Resolution</b>	<p>“As the year began I began to develop a psychogenic tic, was diagnosed with anxiety, depression, OCD and PTSD and had panic attacks multiple times a day, this all was occur in before Covid-19. The onset was before Covid but I was diagnosed as Covid started to spread across America. A positive was that I had that week off of high school before spring break, this was especially useful since I was going through the worst of everything at that moment and gave me a mental break I needed. After this week it was better but worse, I felt that I need to go back and get into a routine despite the stares everywhere I went. I had limited contact with people close to me which I felt that everyone was so distant and needed to be with other people. I had my classes online, as this began I could barely pay attention in class much less on a poorly set up High School class online. I returned to work and formed a small group in which I would spend time with in an out of work. They biggest positives for me were the extra time to spend with my new small group and enough time home allowing me to get a puppy to train as an emotional support dog.”</p>
<b>Elaboration</b>	<p>“Quarantine was, honestly, both a horrible and wonderful time in my life. I was at the lowest I’ve ever been mentally, but I also adopted two emotional support animals and don’t know where I would be without them. The last few months of quarantine, before moving into my apartment, were really hard on my boyfriend and ‘s relationship, but quarantine overall was very beneficial to it.”</p>
<b>Stress</b>	<p>“Anatomy online is my hardest and most stressful experience due to COVID-19. This class is very important for me to do well in and due to it being online I am not doing as well as I could be in this class. I am very stressed over this class but also unmotivated to do the work.”</p>
<b>Coping</b>	<p>“I found that cooking is a great way to alleviate stress for myself personally. Being able to take my mind off of whatever it was that I was worried about and just cook. Doesn’t matter what it is, pasta to pork, it all helps calm me down and get me in the zone. It’s fun thinking of new ways to cook something I’ve done a million times before, new spices, new way to heat it, new side to server it with, new techniques, it’s all a great way to focus on something that isn’t stressing my out.”</p>

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