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EMOTIONALITY STIGMA SCALE:
MEASUREMENT DEVELOPMENT, RELIABILITY, AND VALIDITY

By

Hayley D. Seely

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Hayley D. Seely

A Dissertation Approved on

6/15/2023

By the following Dissertation Committee

Patrick Pössel, Dissertation Chair

Kristin Mickelson, Dissertation Co-Chair

Anita Barbee, Committee member

Konrad Bresin, Committee member

Amanda Mitchell, Committee member

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ABSTRACT

EMOTIONALITY STIGMA SCALE:
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Hayley D. Seely

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Emotions are biological responses to stimuli that allow individuals to derive meaning, appraise experiences, and prepare to respond. However, individuals perceive emotions differently based on emotion socialization which not only dictates the way emotions are viewed and managed but also has been directly linked with mental health outcomes. Furthermore, research shows emotion socialization is informed by demographic variables such as gender such that the expectations of emotionality differ; where women are taught to express emotions, men are taught to conceal. Given the societal rules regarding emotionality, it is possible that emotionality stigma – the stigma around the experience and expression of emotions – is formed through subtle cues about the deviance or normality of emotionality based upon societal expectations and stereotypes related to gender. To test this theory and develop a measure of emotionality stigma, two studies were conducted. Study 1 served to test the factor structure and reliability of the Emotionality Stigma Scale in two separate samples ($N = 464, 407$, respectively). Using EFA and CFA, the hypothesized factor structure was confirmed with support for the three hypothesized dimensions of emotionality stigma: stigma resistance, stigma endorsement,

and differential treatment. Utilizing this developed scale, in Study 2, emotionality stigma was investigated in relation to similar constructs including expressive suppression, expression, and concealment, masculinity, and physical and mental health outcomes. Taken together, these studies make strides toward understanding emotionality stigma in diverse populations and the role this stigma may play in mental health and social relationships. Implications for both research and practice are discussed.

Keywords: measurement; gender; emotion; stigma; mental health; socialization

TABLE OF CONTENTS

	PAGE
ABSTRACT	iv
LIST OF TABLES	viii
LIST OF FIGURES.....	ix
INTRODUCTION.....	1
STUDY 1	15
METHODS AND MATERIALS	15
Participants.....	15
Procedure.....	16
Measures	16
RESULTS	21
DISCUSSION	25
STUDY 2	27
METHODS AND MATERIALS	27
Participants.....	27
Procedure.....	28
Measures	28
RESULTS	34
DISCUSSION	37
GENERAL DISCUSSION.....	40
CONCLUSION.....	47

REFERENCES.....	48
APPENDICES.....	67
CURRICULUM VITA.....	83

LIST OF TABLES

TABLE	PAGE
1. Means, Standard Deviations, and Bivariate Correlations of Major Variables in Sample 2.....	61
2. Bivariate Correlations by Emotionality Stigma Domain in Sample 2.....	62
3. Gender Differences in Emotionality Stigma.....	63
4. Post Hoc Investigation of the Role of Masculinity in Gender Differences.....	64

LIST OF FIGURES

FIGURE	PAGE
1. Measurement Model Depictions	65
2. CFA Factor Loadings for Model 1 in Sample 1	66

INTRODUCTION

Stigma – defined as a mark of disgrace or shame based on life circumstances or qualities of an individual or group (Goffman, 1963) – is a well-researched phenomenon that has a notable impact on stigmatized groups (Bos et al., 2013; Logie et al., 2021; Stangl et al., 2019). Specifically, stigma has been associated with increased internalizing behaviors (Lacey et al., 2015) and self-stigma (Topkaya, 2014), as well as decreased help-seeking behavior (Clement et al., 2015; Sickel et al., 2014). Research has also illustrated a relationship between the experience of stigma and mental health symptomatology suggesting stigma negatively impacts mental health while also diminishing an individual’s likelihood of seeking treatment (Clement et al., 2015; Kondrat et al., 2018; McGarrity et al., 2013). As mental health diagnoses account for approximately 10% of the global burden of disease (Rehm & Shield, 2019; Sischka et al., 2020), understanding the impact of stigma, and specifically, different types of stigma, on mental health is a worthwhile subject for continued investigation.

Stigma reinforces social inequities present in society (Parker & Aggleton, 2003) further impacting both mental and physical health outcomes (Solar & Irwin, 2010). Researchers have defined numerous types of stigmas including health-related stigma (including both physical and mental health subsets; Stangl et al., 2019), as well as identity-related stigma experienced by groups presenting with marginalized identities

(Drabish & Theeke, 2022; Logie et al., 2021), and begun exploring the differential impacts of these types of stigma on affected groups. However, research has focused solely on stigma surrounding identities or documented physical or mental health concerns and has yet to investigate the relevance of stigma in everyday experiences such as the experience of emotions based on socially constructed norms. The current studies aim to address this gap in research through the development of a measure of emotionality stigma and the investigation of the reliability and validity of this measure.

Emotionality Stigma

Emotionality stigma, a relatively new construct defined by Seely and Mickelson (2021), is the experience of stigma related to one's emotionality, or experience and expression of emotions, based upon societal norms and expectations. In brief, emotionality stigma is proposed to be an iatrogenic effect (i.e., an unintended negative side-effect) of the emotion socialization process such that the deviance and normality of emotionality are communicated through relational instruction and behavior from partners, friends, and family members, as well as the modeling present within society more generally (Pederson & Vogel, 2007; Safdar et al., 2009; Vogel et al., 2011). These messages of deviance and normality then lead to emotionality stigma – the stigma around the experience and expression of emotions (Seely & Mickelson, 2021; Seely, in preparation). Like other forms of stigma, emotionality stigma is theorized to have vast effects on the individual through increased internalization (Lacey et al., 2015) and decreased help-seeking behavior (Clement et al., 2015; Sickel et al., 2014), and, ultimately, as a result, impaired mental health outcomes.

Seely and Mickelson (2021; in preparation) identify emotionality stigma as a multidimensional, complex construct encompassing both personal beliefs (stigma endorsement and resistance) and societal expectations (differential treatment). Therefore, societal norms for emotionality for different groups such as men versus women are theorized to impact emotionality stigma overall. Following this conceptualization, I propose emotionality stigma consists of three distinct dimensions: stigma endorsement, stigma resistance, and differential treatment. *Stigma endorsement* concerns the extent to which an individual holds stigmatized beliefs about emotionality. *Stigma resistance*, on the other hand, is a protective factor consisting of an individual's endorsement of positive views on emotionality. Finally, *differential treatment* taps into the perceived societal expectations and responses surrounding emotionality including treating individuals differently based on their emotionality (i.e., the extent to which an individual views emotionality as stigmatized within society).

The Role of Gender Identity

As emotion socialization serves as a core construct within the conceptualization of emotionality stigma, sociocultural identities are important to consider. Research shows emotion socialization differs based upon group identity with socialization typically looking different between racial, ethnic, and gender groups (Friedlmeier et al., 2011; Kennedy Root & Denham, 2010). Gender specifically plays a notable role in what level of emotionality is considered socially acceptable for whom. In fact, extensive research has documented gender stereotypes relevant to emotion expression such that it is acceptable and expected for women to be emotional and display a wide range of emotions (e.g., fear, guilt, happiness, love, sadness, and shame), whereas men are expected to be

emotionless overall with the only few acceptable emotions being anger and pride (Plant et al., 2000). Furthermore, when emotional expression conflicts with gender stereotypes (e.g., a man expressing sadness) individuals report negative outcomes including self-stigma and decreased disclosure (Pederson & Vogel, 2007; Vogel et al., 2011). As a result, women and men alike often suppress emotions not congruent with these gender stereotypes (Plant et al., 2000).

The majority of past research has been based on a binary conceptualization of gender and little research has investigated societal expectations for emotion experience and expression in those identifying as non-binary or gender fluid. What has been suggested by research is that emotions including shame and exhaustion may be experienced by those who identify as non-binary or gender fluid as a result of gender-based oppression (Sinnard et al., 2022) and that the experience of ungendering, or moving away from binary definitions of gender and gendered behaviors, is inherently emotional (Barbee & Schrock, 2019). It is unclear how emotionality stigma, as currently defined, would impact those identifying as non-binary or gender fluid. On one hand, it may be that due to the process of rejecting traditional gender norms (Barbee & Schrock, 2019; Vijlbrief et al., 2020), emotionality stigma is less impactful in this population. On the other hand, most non-binary individuals are raised in a binary environment which means that their emotion socialization will look the same as cisgender individuals. Due to the lack of research in this area and the novel nature of the construct of emotionality stigma, the research reported in this paper focused on cisgender women and men.

Clearly, societal expectations on emotionality differ depending on identities, context, and the specific emotion being expressed (Brody, 1999; Chaplin & Aldao, 2013).

As such, emotionality stigma is nuanced and may be endorsed differently between groups and across contexts (Seely, in preparation). The role of identities, including race and ethnicity, in emotion socialization and emotionality stigma is further discussed in the work of Seely (in preparation) and is an avenue for future research. However, for the purpose of this research, the role of gender was the focus. Given the differential expectations of emotionality based on gender (Boysen & Logan, 2017), it is likely women and men would report differing levels of emotionality stigma as a result of the role of gender in emotion stigmatization. Taken together, gender is an important variable to consider in the conceptualization and measurement of emotionality stigma as the stigma an individual feels will likely vary based on demographic information such as gender. It is important to note however, that although levels of emotionality stigma are proposed to differ based on group identity, the theoretical underpinnings of the construct, and therefore the structure are theorized to remain the same.

Measurement Considerations

As the conceptualization of emotionality stigma is based on both emotion socialization and stigma research, it follows that current measurement of these constructs should be considered. Numerous measures, which will be further detailed below, have been created to assess emotion socialization and stigma alike (Brohan et al., 2010; Horner & Wallace, 2013). However, no instrument has yet to target the proposed overlapping construct of emotionality stigma.

Emotion Socialization Measurement

Researchers have developed many methods to measure how individuals are taught to regulate their emotions in ways that adhere to social and cultural norms (i.e., emotion

socialization; see Horner & Wallace, 2013, for review). These measures vary with some focusing on parent reaction to child emotionality (e.g., Fabes et al., 2002; Ladouceur et al., 2002; Magai, 1996) and others focusing on emotion expressiveness (e.g., Halberstadt et al., 1995). Furthermore, some measures assess the socialization of specific emotions (e.g., sadness, anger, fear; Magai, 1996) while others are more generalized (e.g., Fabes et al., 2002; Halberstadt et al., 1995; Ladouceur et al., 2002). Within this body of research, many instruments have shown promise in the operationalization of emotion socialization within families. Two instruments that are particularly relevant to the conceptualization of emotionality stigma due to their inclusion of positive and negative emotions, the *Emotions as a Child Scale* (EAC; Magai, 1996) and the *Self-Expressiveness in the Family Questionnaire* (SEFQ; Halberstadt et al., 1995).

The *Emotions as a Child Scale* (Magai, 1996) is a self-report measure that focuses on how a parent has responded in the past to child expression of specific emotions (anger, fear, and sadness). This scale has been extensively used within research and has been adapted to include several rater options including child-report in which the child is asked to indicate their parent's response to their emotions and parent-report in which the parent self-reports their response to their child's emotions (Horner & Wallace, 2013). In both versions the respondent indicates the frequency of five response types – reward, neglect, override, punish, and magnify – related to each emotion; these response types are separated into individual subscales. The EAC has been extensively used in research but shows varying psychometric properties depending upon subscale and population (Guo et al., 2017; Luo et al., 2020). Guo and colleagues (2017) found support, through measurement invariance analyses, for consistent interpretation of the EAC across gender

groups (Guo et al., 2017). Furthermore, a revised 2-factor structure has been supported by recent research using Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) suggesting that instead of measuring five response types, the instrument measures two: supportive (comprised of reward and override) and unsupportive (comprised of neglect and magnify; Guo et al., 2017; Luo et al., 2020). This two-factor structure has been shown to have criterion validity such that supportive scores positively correlate with parent-child closeness, and unsupportive scores positively correlate with parent-child conflict and negatively correlated with parent-child closeness (Guo et al., 2017; Luo et al., 2020).

Unlike the EAC, the *Self-Expressiveness in the Family Questionnaire* (SEFQ; Halberstadt et al., 1995) was designed to assess emotion expressiveness within the family context instead of addressing the parent-child relationship exclusively. The SEFQ gathers information related to both positive and negative emotional responses. This instrument poses 40 hypothetical scenarios and asks the participant to report the frequency with which they express positive and negative emotions within each situation. The SEFQ has been assessed for both reliability and validity (Halberstadt et al., 1995). Results of an EFA suggest the presence of two factors that are theoretically supported: positive expression and negative expression. These two factors show high internal consistency, stability over time, and validity.

Although there are many instruments that have been shown to produce scores associated with respective outcomes and used to assess emotion socialization, none of them measures the role of society in emotion socialization and the potential for the stigmatization of emotionality. Given the role of social norms in emotion socialization

and in the theoretical underpinnings of emotionality stigma (Seely, in preparation), considering these social norms in a measure of emotionality stigma will be key. As such, to conceptualize emotionality stigma and begin the development of an appropriate measure, stigma research and measurement must also be explored.

Mental Health Stigma Measurement

As stigma is a large area of research, many instruments have been developed to assess different types of stigma. For the purpose of understanding stigma scales in relation to emotionality stigma specifically, current mental health stigma scales may be applicable as emotionality and mental health often overlap. Specifically, severe emotionality is a symptom of many mental health disorders (e.g., mood disorders, anxiety disorders; American Psychiatric Association, 2013). Furthermore, the specific items used in mental health stigma measures map onto emotionality stigma as feeling stigmatized based on one's mental health is core to both constructs; where mental health stigma deals with diagnosed clinical disorders, emotionality stigma deals with day-to-day emotion expression. In other words, mental health stigma measures, more than other existing measures of stigma (e.g., physical health stigma), focus on the experience an individual has when feeling stigmatized about the presentation of their inner states to society.

Within mental health stigma research, two instruments have been evaluated and used as multidimensional measures and include subscales that may be relevant for the development of a measure of emotionality stigma (see Brohan et al., 2010 for review). The *Internalized Stigma of Mental Illness Scale* (ISMI; Ritsher et al., 2003) was designed to measure internalized mental health stigma. The scale is comprised of five subscales: alienation, stereotype endorsement, discrimination experience, social withdrawal, and

stigma resistance. The alienation subscale addresses feeling separated from society as a result of mental illness; the stereotype endorsement subscale addresses societal stereotypes regarding mental illness; the discrimination experience subscale addresses personal experience with mental health discrimination; the social withdrawal subscale addresses choices to isolate from society as a result of mental illness; and the stigma resistance subscale addresses positive feelings about mental illness which are reverse coded. Participants report the extent they agree with each statement. The ISMI has been widely used in research (Brohan et al., 2010). Ritsher and colleagues' (2003) findings indicate adequate internal consistency, test-retest reliability, and validity overall. Similar results are found in other studies with diverse populations (Ersoy & Varan, 2007; Tanabe et al., 2016). The ISMI has been found to positively correlate with similar measures (e.g., stigma beliefs scales; Ritsher et al., 2003) and with measures of depression (Ersoy & Varan, 2007; Tanabe et al., 2016).

Similarly, the *Positive Beliefs about Mental Illness Scale* (PBMI; Forgeard et al., 2016) was developed to measure stigma related to mental illness with a focus on positive attributes. Forgeard and colleagues (2016) produced 6-items that correspond with one factor: positive aspects of mental illness. Participants indicate their agreement with each item and negatively worded questions or reverse coded. Although less utilized than that ISMI, the PBMI shows adequate validity and reliability overall and is negatively related to mental health outcomes (Forgeard et al., 2016). The PBMI has also been found to be a distinct, but related construct to the ISMI (Forgeard et al., 2016). While the PBMI shows promise, more research is needed to gain a better understanding of the psychometric properties and its performance across groups.

Taken together, these two measures of mental health stigma suggest that mental health stigma incorporates both an individual's beliefs (both positive and negative) and their perception of the way society views mental health. Furthermore, these negative beliefs and perceptions are positively correlated with depressive symptoms (Ritsher et al., 2003) and negatively correlated with variables such as self-esteem (King et al., 2007; Ritsher et al., 2003); whereas positive beliefs are negatively correlated with mental health impairment (Forgeard et al., 2016). Although emotionality stigma may look similar to mental health stigma, measures of mental health stigma do not capture emotionality stigma because they focus specifically on an individual's mental health or mental illness and not on emotionality more generally (e.g., "I feel out of place in the world because I have a mental illness"). However, measures of mental health stigma may be particularly helpful in the development of a measure of emotionality stigma due to their proposed overlap in constructs as detailed above. For example, the PBMI item "My mental illness lets me think in interesting and insightful ways" could be meaningfully adapted to measure emotionality stigma by replacing "mental illness" with "emotions", whereas items from other measures of stigma such as the *HIV Stigma Scale* (Berger et al., 2001) are less amenable to meaningful adaptation (e.g., "Telling someone I have HIV is risky"; "People with HIV lose jobs when employers find out").

Considerations for a New Measure

Prior to discussing specific considerations related to item development, it is important to note that the theoretical underpinnings of emotionality stigma are not exclusive to a specific population. Although it is proposed in the theory of emotionality stigma (Seely & Mickelson, 2021; in preparation) that differences in endorsement will be

observed in different populations, this is proposed due to the role of emotion socialization and does not mean the concept is expected to function differently. Instead, the theory and measurement of emotionality stigma intended to be generalized as emotionality stigma may have the scope to impact anyone, regardless of demographic information such as race, gender, and age. Although this generalized approach is important for the theoretical development of emotionality stigma, in instrument development it will be essential to select a population of interest (e.g., adults in the United States) as populations differ and measures need to be used in the populations in which they are intended (AERA et al., 2014). However, given gender has been identified as an important component relevant to emotionality stigma, women and men should be included as this will be essential for exploring these demographic differences statistically.

Another important consideration in measurement development is that emotionality stigma has defined theoretical dimensions (stigma endorsement, stigma resistance, and differential treatment) that should be reflected in item development. The consideration of these dimensions is recommended for multiple reasons. First, it is important for measurement to be based upon theory as this is how content validity is operationalized (AERA et al., 2014). As such, items that are relevant to the proposed construct based on theory and the measure's dimensionality will be key (AERA et al., 2014). Second, ensuring item development covers the three outlined theoretical dimensions will help avoid measurement underrepresentation which occurs when measurement is too narrow and thus misses key components of the theoretical construct (Boateng et al., 2018; Spurgeon, 2017). Finally, measurement of the outlined dimensions may also serve useful in understanding differences in emotionality stigma in diverse

groups (Boateng et al., 2018) as well as in future research more generally. For example, it may be that some groups endorse more differential treatment whereas other groups endorse more emotionality stigma endorsement based on their experience with emotion socialization (Seely & Mickelson, in preparation).

Given the proposed overlap between mental health stigma and emotionality stigma, utilizing measures of mental health stigma to inform the development of this new measure is appropriate and recommended (Boateng et al., 2018). Unlike other pre-existing measures of stigma, mental health stigma measures touch on the experience of stigma based on the expression of one's inner experience (i.e., mental health symptoms). Furthermore, as many mental health diagnoses are typified by severe emotionality (American Psychiatric Association, 2013), stigma may result from the assumption that emotionality has roots within mental health issues. As such, with attention to the theoretical dimensions, relevant mental health stigma items can be adapted for the Emotionality Stigma Scale. For example, the ISMI (Ritsher et al., 2003) discrimination subscale item "Others think that I can't achieve much in life because I have a mental illness" can be used as a reference to develop an item for the emotionality stigma differential treatment scale such as "Others think that people who are emotional can't achieve much in life." Boateng and colleagues (2018) specifically recommend utilizing developed and tested measures to inform the construction of a new measure through adaptation if possible. Furthermore, using pre-existing measures to inform new measures allows for the continuous improvement of psychological measurement.

Finally, the developed measure of emotionality stigma needs to produce reliable and valid results (AERA et al., 2014). In order to accomplish this, special consideration

will need to be given to the meaning of each included item. This can be accomplished through utilizing theory in item development and having the proposed items and subscales reviewed by content experts in both emotion socialization and stigma. Once the items have been identified and approved by content experts, it will be necessary to use factor analysis to explore the factor structure of the scale, calculate internal consistency analyses for each identified subscale and the total scale, and check inter-item correlations for redundancy.

Current Studies

Emotion socialization (see Zeman et al., 2012 for review) and stigma (see Corrigan & Watson, 2007; Sickel et al., 2014 for reviews) are two constructs that have been well defined and extensively researched. However, it may be that these two constructs overlap in an important way that has yet to be empirically tested. Specifically, it may be that through emotion socialization, a stigma is formed around emotionality through subtle cues about the deviance and normality of emotion expression. In defining the theoretical underpinnings of emotionality stigma, Seely (in preparation) proposes the construct has three distinct dimensions – stigma endorsement, stigma resistance, and differential treatment – which are meaningful for measurement. The aim of the current studies is to develop a measure of emotionality stigma to be used in future research and in practice by 1) adapting items for a measure of emotionality stigma and examining their reliability using EFA and CFA and 2) conducting a validity study in which both convergent and discriminant validity are tested.

Supported by the proposed theory of emotionality stigma (Seely, in preparation), it is hypothesized that the measure will consist of three factors representing the three

dimensions of emotionality stigma (*Study 1, Hypothesis 1*), and that these factors will meet reliability standards both separately and in unison (*Study 1, Hypothesis 2*). For Study 2, the Emotionality Stigma Scale will be tested in relation to different constructs of interest including demographic factors, emotion concealment, suppression, and expression, mental health (aggression, anxiety, depression, and well-being), physical functioning, and significant life events. Specifically, given the proposed theoretical relationship between emotionality stigma and mental health, it is hypothesized that the measure of emotionality stigma will be positively correlated with emotion concealment and suppression as well as aggression, anxiety, and depression (*Study 2, Hypothesis 1*), negatively correlated with emotion expression and well-being (*Study 2, Hypothesis 2*), and uncorrelated with physical functioning and the experience of significant life events (*Study 2, Hypothesis 3*). Furthermore, differential levels of emotionality stigma based on their gender identity is expected (*Study 2, Hypothesis 4*).

STUDY 1

METHODS AND MATERIALS

Participants

Two samples were collected, an adult sample was recruited from Amazon's Mechanical Turk (Mturk), and a college sample was recruited from a United States university survey system. After participant exclusion based on incomplete response (< 50% of the survey), missed attention checks, and location (not residing in the US), the adult sample consisted of 464 participants and the college sample consisted of 407 participants. Although the completion time was variable, the data was assessed for carelessness which suggested retained participants were not carelessly responding.

In comparing these samples, Mturk participants were significantly different than participants recruited using the university survey system in terms of age, $t(860) = -23.91$, $p < .001$, gender, $\chi^2(2, N = 862) = 81.55$, $p < .001$, and race, $\chi^2(4, N = 862) = 113.68$, $p < .001$. Overall, the Mturk sample was older and had greater representation of African American participants and men, whereas the SONA sample was younger and had greater representation of Hispanic and Asian participants and women. The average Mturk participant was in their early-30's ($M = 34.0$, $SD = 9.3$, $Range = 19$ to 68), identified as White (73.9%; 10.8% African American, 8.0% Hispanic, 4.8% Asian, 2.6% Other), and identified as men (56.2%). The average participant recruited using the university survey

system was in their early 20's ($M = 21.6$, $SD = 4.9$, $Range = 18$ to 59), identified as White (47.5%; 5.2% African American, 33.7% Hispanic, 7.1% Asian, 6.4% Other), and identified as women (73.5%).

Procedure

Participants were recruited through Amazon's Mechanical Turk and a United States university survey system. The university survey system is used as a way to expose undergraduate social and behavioral sciences students to research and provide a pool of participants for researchers. Studies are posted on the system and students are able to select which studies in which they would like to be involved. Based on the time required for participation, different research credit is awarded. This research credit then often translates into an assignment or extra credit in a specific course. IRB approval from Arizona State University was obtained before conducting the study and all participants (regardless of recruitment) provided informed consent prior to participation. In order to participate, the participant had to be 18 years of age or older. Participants completed a 20-minute electronic questionnaire. Following participation, participants were provided with a list of community services available to them (local resources were provided for the college sample whereas national hotlines were provided for the community sample) and compensated (\$1 or research credit) for their time.

Measures

Demographics. Participants were asked to complete a short demographic questionnaire. Specifically, participants reported their age, sex, gender identity (woman, man, gender non-binary, transgender, other), sexual orientation (heterosexual, lesbian, gay, bisexual, queer, asexual, pansexual, other), race (American Indian or Alaska Native,

Asian or Asian American, Black or African American, Native Hawaiian or Other Pacific Islander, White, Biracial, other) and ethnicity (Hispanic or non-Hispanic).

Emotionality Stigma Endorsement. Participants' stigma around emotionality was assessed through a 36-item measure adapted from the ISMI, which addresses internalized alienation, stereotype endorsement, discrimination experience, social withdrawal, and stigma resistance (Ritsher et al., 2003) and the PBMI, which assesses positive attributions related to mental illness (Forgeard et al., 2016). These scales were adapted and reviewed by experts in stigma and emotion research to measure internalized stigma around emotionality instead of mental illness (e.g., "People discriminate against individuals who are more emotional"; "Stereotypes about emotionality are valid"; "Emotions are a source of weakness"). Each item was individually adapted with the help of experts in stigma and emotion research to match the meaning of the original measure with an external view. For example, measures that used first person language were changed to third person language to gather the participant's view of how emotionality is viewed by society and "mental health" was replaced with "emotions", "emotional", or "emotionality". Each adapted item was then reviewed by a research lab to ensure meaning was sustained. This research lab consisted of members from different levels of schooling (undergraduate and masters), with different academic, social, and economic backgrounds. Finally, the experts in stigma and emotion research reviewed the adapted items and approved the adaptations; this was an iterative process during which the experts communicated back and forth regarding necessary changes and theoretical applicability. Through this process, items theorized to be meaningful for the emotionality stigma measure were identified and recorded. Three items were flagged as less

theoretically relevant (“People can tell when someone is emotional by the way they look”; “Emotional people shouldn’t get married”; “Emotional people tend to be violent”) and were excluded from the study. The remaining 33 adapted items were included in data collection and analysis. For the full, adapted measure, please refer to Appendix A. Participants utilized a 4-point Likert scale (1= *strongly disagree*; 4= *strongly agree*) to report the extent they agreed with each statement. Reverse-worded items were recoded to reflect higher emotionality stigma.

Overview of Analyses

Prior to hypothesis testing, participants were excluded due to incomplete response (< 50% of the survey), missing two of the three included attention checks, and residing outside of the US, and the data were examined for missing data. Little’s MCAR test (Little, 1988) shows data were missing at random $\chi^2(1319, N = 862) = 1360.23, p = .21$. Furthermore, only a minimal number of data were missing (1.0%). Missing data is not considered a concern when a small percentage of data are MAR from a large data set (Parent, 2013). In order to test my hypotheses for study 1, EFA utilizing the college sample and CFA utilizing the adult sample were utilized. According to Mundfrom and colleagues (2005), a sample size of 70 would be needed to achieve excellent agreement between the population solution and the sample solutions based on the wide communities between items, the ratio of variables to factors, and the tested factor solutions. For the CFA, a 10:1 N:p ratio (where p represents the number of measured variables) is recommended (see Kyriazos, 2018 for review). Therefore, a sample size of 360 would be suggested given the 36 measured variables. In line with these recommendations, the sample sizes of both datasets are sufficient.

With the college dataset, EFAs were conducted including the adapted items from the ISMI (Ritscher et al., 2003) and the PBMI (Forgeard et al., 2016). Two separate EFAs with Varimax rotation were conducted to compare the statistically driven factor solutions with one based on emotionality stigma theory (Seely, in preparation). The first allowed eigenvalue to define the number of factors, whereas, in the second EFA, the three theorized factors were specified. With these different analyses as evidence, the Kaiser-criterion, scree plot, theory, and parallel analysis were utilized to define item exclusion and ultimately identify the best fitting factor solution.

With the adult dataset, the factor solution was tested with a CFA. The proposed model was a higher order model with a general factor representing emotionality stigma and three sub-factors representing the theorized sub-scales. The fit of the proposed model was assessed using the following indices: Akaike Information Criterion (AIC; Akaike, 1974), Comparative Fit Index (CFI; Bentler, 1990, 2006), Root Mean Square Error of Approximation (RMSEA; Steiger, 1990), Tucker Lewis Index (TLI; Bentler & Bonett, 1980; Tucker & Lewis, 1973), and χ^2 . Fit of the model to the data is illustrated by higher CFI and TLI values, lower RMSEA and AIC values, and statistically nonsignificant values of χ^2 (although χ^2 is known to increase with sample size and will, thus only be considered in conjunction with other indexes of fit). CFA, TLI, and RMSEA fit indexes range from 0 to 1. The closer the CFI and TLI are to 1 the better fitting the model; CFI and TLI $\geq .95$ indicates a good model fit and a value of $\geq .90$ is seen as an acceptable fit (Hu & Bentler, 1999). The closer the RMSEA to 0, on the other hand, the better the fit; values of $\leq .05$ indicate a good model fit, and values of $\leq .08$ are regarded as acceptable (Hu & Bentler 1999).

In addition, I compared the proposed model with three alternative models; one in which the retained items from the EFA were modeled on one latent factor without the theorized subscales, another in which each subscale was represented by a separate latent factor allowed to correlate with each other, and finally, a third in which the general factor was indicated by two latent factors – one representing personal beliefs of emotionality stigma indicated by the retained items for the stigma endorsement and stigma resistance subscales and another representing the societal expectations indicated by the differential treatment subscale items. In comparing models, significance in the difference between the fit of the models was determined using ΔAIC , ΔCFI , and $\Delta\chi^2$. AICs can be compared, with lower AIC models fitting the data better (Akaike 1974). A ΔAIC of 0–2 suggests substantial support for the equivalency of both models, 4–7 suggests weak support, and > 10 suggests essentially no support (Burnham & Anderson, 2002). According to Meade and colleagues (2008), a ΔCFI of > .002 suggests a significant difference between the models; the model with a higher CFI fits the data better. A ΔCFI of \leq .002 suggests no significant difference between the models in which case the more parsimonious model should be retained. A significant $\Delta\chi^2$ indicates a statistically significant difference in fit between models; this assessment of fit is only appropriate to use with models that are structurally the same (nested models).

STUDY 1

RESULTS

In support of my hypotheses, the EFA supported a 3-factor solution with the items in each factor matching the theoretical dimensions – stigma endorsement, stigma resistance, differential treatment. Although the Kaiser-criterion suggested a 6-factor solution when conducted with all 33-adapted items, the scree plot (Appendix B) and theory supported 3 factors. In the 6-factor solution, the fourth, fifth, and sixth factor have eigenvalues of 1.609, 1.199, and 1.104, accounting for 4.47%, 3.33%, and 3.067% of the variance in the model, respectively (Appendix C). In relation to the parallel analysis (Appendix D), the random eigenvalues produced by the parallel analysis surpass those from the EFA at the fifth factor (parallel analysis eigenvalue = 1.353; EFA eigenvalue = 1.196) suggesting a 4-factor model is a superior fit.

Based on these fit indices a 6-factor solution, 4-factor solution, and the theorized 3-factor solution were compared (see Appendix E and F for factor loadings). Overall, all three factor solutions illustrated consistency with many of the same items loading onto the theorized factors across these EFAs. Of note, in both the 6-factor solution and the 4-factor solution, only two items (“Emotions make people less productive” and “Emotions have some negative consequences”) loaded onto the last factor. The 6-factor solution also split two of the theorized factors. Specifically, differential treatment items loaded onto

two factors, one focused on how society responds to emotional people and another focused on how emotional people behave differently due to societal expectations. Stigma resistance items also loaded onto two factors with one factor having items regarding general benefits of emotionality and the other factor focusing on ability of emotional people to live a good life and contribute to society. In both of these cases, the items that load onto the additional factor still cross-load with the theorized factor. These split factors were then combined in the 4-factor model and the 3-factor model alike. Given these comparisons, the consistency noted in the theorized factors, and the empirical and theoretical support, the 3-factor model was maintained. As a robustness check, these analyses were repeated using a random subset of the data with both adult and college participants. These results were consistent with those reported here.

Following the comparison of models, item reduction procedures were initiated which included removing items that were loading under .3 on all factors or were cross-loading with a difference in loading at or below .1. These items were excluded one-by-one based on theoretical assumptions of emotionality stigma (Appendix E and F). Through this process, 3 items were excluded (“People who are not emotional could not possibly understand someone who is emotional”; “People feel comfortable being seen in public with an obviously emotional person.”; “Emotions have some negative consequences”). The final Emotionality Stigma Scale after item exclusion (see Appendix G) represents the three theorized dimensions of emotionality stigma with a 10-item stigma endorsement subscale, an 8-item stigma resistance subscale, and a 12-item differential treatment subscale. Further supporting the 3-factor solution, after excluding irrelevant variables informed by theory and factor loadings, internal consistency

illustrated adequate reliability for each subscale (stigma endorsement: $\alpha = .90$; stigma resistance: $\alpha = .83$; differential treatment: $\alpha = .86$) and the total scale ($\alpha = .88$).

The 3-factor solution was further supported by the tested CFA models (for visual depiction see Figure 1). Using the factor loadings from the EFA, the highest loading item for each factor (stigma endorsement: *“People who are emotional should be disappointed in themselves for being emotional”*; stigma resistance: *“Emotional people make important contributions to society”*; differential treatment: *“People discriminate against individuals who are emotional”*) was fixed to 1 for proper identification. Model 2, in which each factor (stigma endorsement, stigma resistance, and differential treatment) served as an individual latent construct – indicated by the observed items specific to their designated construct – and correlated with the other factors fit the data best: $\chi^2(402, N = 407) = 926.129, p < .001, CFI = 0.91, TLI = 0.90, RMSEA = 0.05, AIC = 1112.129$. The theorized hierarchical model, Model 1, in which the three factors mapped onto a general factor representing emotionality stigma emerged as the next best-fitting model, $\chi^2(403, N = 407) = 1182.736, p < .001, CFI = 0.87, TLI = 0.84, RMSEA = 0.07, AIC = 1366.736$. However, Model 2 was considered a better fit with a significantly higher CFI and a significantly lower AIC and χ^2 ($\Delta CFI = .04, \Delta AIC = 254.61, \Delta \chi^2(1, N = 407) = 256.607, p < .001$). The final two models, Model 3 and 4, did not fit the data well. Model 3, which represented emotionality stigma as one latent factor indicated by all retained items, illustrated a poor fit ($\chi^2(405, N = 407) = 1821.529, p < .001, CFI = 0.75, TLI = 0.72, RMSEA = 0.09, AIC = 2001.529$), and Model 4, which combined the theorized stigma endorsement and stigma resistance factors into one measure of personal beliefs about emotionality stigma, produced negative variance and was therefore inadmissible (CFI =

0.81, TLI = 0.79, RMSEA = 0.08, AIC = 1661.371). Comparing Model 3 and Model 4 with Model 1 further illustrates poor fit suggesting Model 1 as a significantly better fitting model (comparison with Model 3: $\Delta\text{CFI} = .12$, $\Delta\text{AIC} = 634.793$, $\Delta\chi^2(1, N = 407) = 638.793$, $p < .001$; comparison with Model 4: $\Delta\text{CFI} = .06$, $\Delta\text{AIC} = 294.635$). Finally, the 4-factor model indicated by the EFA was investigated as an alternative model. Although, this model was the next best fitting after Model 1 and 2 ($\chi^2(432, N = 407) = 1264.340$, $p < .001$, CFI = 0.85, TLI = 0.84, RMSEA = 0.07, AIC = 1454.340), the 3-factor models remained superior further supporting the theorized model (Model 1). Specifically, in comparing Model 1 with the 4-factor model, Model 1 produced significantly better fit in terms of CFI, AIC, and χ^2 ($\Delta\text{CFI} = .02$, $\Delta\text{AIC} = 87.6$, $\Delta\chi^2(1, N = 407) = 81.6$, $p < .001$).

Given the statistical and theoretical support for Model 1, a multigroup analysis was conducted to check gender invariance. This analysis found no significant difference in the factor structure between cisgender men and women suggesting gender invariance of the construct of emotionality stigma as hypothesized (comparison of the constrained model and the unconstrained model: $\Delta\chi^2(27, N = 407) = 31.875$, $p = .237$). Factor loadings and covariances for Model 1 are displayed in Figure 2.

STUDY 1

DISCUSSION

Using the theory of emotionality stigma (Seely, in preparation) to inform measurement development, I hypothesized a 3-factor solution representing the three theorized dimensions of emotionality stigma. My results supported this hypothesis overall. Although some fit-statistics including the Kaiser-criterion suggested additional factors, these factors accounted for little variance, had high cross-loadings or lacked factor loadings, and were inconsistent with theory. Furthermore, the final theorized factors with retained items based on theory and quantitative support illustrated internal consistency meeting reliability standards (AERA., 2014). The CFA again supported a 3-factor solution, although suggesting a superior model is one in which the three factors of emotionality stigma are correlated instead of representing three factors of the same construct – emotionality stigma. This was an interesting and unexpected finding that should be further explored in future research. Although theory suggests emotionality stigma as one construct made up of personal beliefs (stigma endorsement and resistance) and societal expectations (differential treatment; Seely, in preparation), it may be that multiple measures of emotionality stigma representing different aspects of this construct would have better research and clinical utility. Specifically, as stigma resistance emerged as less correlated with stigma endorsement and differential treatment, perhaps measuring

positive and negative views of emotionality separately has value. This was further investigated in Study 2 by utilizing CFA to examine the factor structure of the Emotionality Stigma Scale in additional populations, and testing validity of the scale both in unison and with each factor separately.

Informed by theory along with the EFA and the CFA conducted in Study 1, 30 of the 33 original items adapted from the *Internalized Stigma of Mental Illness Scale* (Ritsher et al., 2003) and the *Positive Beliefs about Mental Illness Scale* (Forgeard et al., 2016) were retained and 3 were excluded. In Study 2, the newly developed Emotionality Stigma Scale (Appendix F) was tested for validity across 3 diverse samples.

STUDY 2

METHODS AND MATERIALS

Participants

Participants were recruited from PROLIFIC, an online study recruitment system, and two United States universities, one located in the Southwest and the other located in the Midwest. The targeted sample size after participant exclusion based on incomplete response (< 50% of the survey), and missed attention checks, was 650 (50% women) based on an a priori power analysis using G*Power (Faul et al., 2007), with an estimated effect size of .22 which is the average effect size for social psychological research examining gender differences (Lovakov & Agadullina, 2021), an alpha of .05, and power of .80. This targeted sample size was surpassed, with a final sample of 848 participants (PROLIFIC: $n = 362$, Southwest University: $n = 269$, Midwest University: $n = 217$). The average participant was in their late-20's to early-30's ($M = 29.87$, $SD = 13.11$, $Range = 18$ to 76), and identified as Non-Hispanic (84.1%), White (70.5%; 10.6% Black or African American, 7.1% Biracial, 5.7% Asian or Asian America, 4.6% Other, 1.4% American Indian or Alaska Native), women (64.3%; 31.7% men, 3.4% gender non-binary, 0.4% transgender, 0.2% other).

Procedure

Participants were recruited using PROLIFIC as well as through the universities' survey systems, announcements in classes, and fliers. The university survey systems used in study 2 mimic those used in study 1. IRB approval was obtained from both universities prior to conducting the study, and all participants provided informed consent prior to participation. Participants were required to be at least 18 years of age. Participants completed a 30-minute electronic questionnaire in which measures were randomized to diminish order effects. Following participation, participants were provided with a list of community services available to them and compensated for their time. University participants were compensated via research credit, whereas participants recruited through PROLIFIC were compensated monetarily (\$3.50).

Measures

Demographics. Following the same procedure as study 1, participants were asked to complete a short demographic questionnaire. In addition to the demographic questions from study 1, participants were also asked to report their family's socioeconomic status via yearly income (less than \$25,000, \$25,001 - \$34,999, \$35,000 - \$49,999, \$50,000-\$74,999, \$75,000 - \$99,999, \$100,000 - \$149,999, \$150,000-\$199,999, or more than \$200,000) and the MacArthur Scale of subjective social status (SSS; Adler & Stewart, 2007) with which participants indicate their perception of where they fall in comparison with those in their community by placing an 'X' on the appropriate rung of a ladder. Finally, participants indicated their level of conformity to masculine ideals across 6 items from the Conformity to Masculine Norms Inventory (Mahalik et al., 2003; $\alpha = .91$).

Emotionality Stigma. Emotionality stigma was assessed using the Emotionality Stigma Scale tested in study 1. Based on the EFA and CFA calculated in study 1, the Emotionality Stigma Scale is a 30-item measure created to measure an individual's emotionality stigma across three dimensions: stigma endorsement, stigma resistance, and differential treatment. Participants utilized a 4-point Likert Scale (1= *strongly disagree*; 4= *strongly agree*) to report the extent they agreed with each statement. In study 1, the Emotionality Stigma Scale met reliability standards (AERA, 2014) with the following internal consistencies: total score ($\alpha = .88$), stigma endorsement ($\alpha = .90$), stigma resistance ($\alpha = .83$), and differential treatment ($\alpha = .86$). These internal consistencies remained consistent in study 2 (total score: $\alpha = .88$, stigma endorsement: $\alpha = .87$), stigma resistance ($\alpha = .81$), and differential treatment ($\alpha = .87$). A sum score was created for each factor with higher scores indicating more stigma endorsement, stigma resistance, and differential treatment respectively. A sum score was also created for total emotionality stigma in which the stigma resistance items were reverse coded; higher scores indicate more emotionality stigma overall.

Self-Concealment. The Self-Concealment Scale (SCS; Larson & Chastain, 1990) was administered to measure concealing behavior. This 10-item self-report scale was developed to assess an individual's tendency to conceal personal information from others due to thinking the information is negative or distressing. Sample items include: "*I have an important secret that I haven't shared with anyone*"; "*There are lots of things about me that I keep to myself.*" Participants were asked to share their agreement with each statement on a 5-point Likert-type scale (1= *strongly disagree*; 5 = *strongly agree*). A sum score was created with higher scores indicating more self-concealment. Extensive

research supports the SCS as a reliable and valid measure (Larson et al., 2015; Larson & Chastain, 1990). In their original work, Larson and Chastain (1990) report test-retest reliability and internal consistency estimates as .81 and .83, respectively. In a college sample, test-retest reliability and internal consistency estimates were reported as 0.83 - 0.87 and 0.74, respectively (Cramer & Barry, 1999). Internal consistency in the present study was $\alpha = .91$.

Expressive Suppression. I administered the four-item suppression subscale from the Emotion Regulation Questionnaire (ERQ; Gross & John, 2003). Participants utilized a 7-point Likert-type scale (1= *strongly disagree*; 7 = *strongly agree*) to indicate their engagement in emotion suppression (e.g., “*I control my emotions by not expressing them*”). A sum score was created with higher scores indicating more expressive suppression. This subscale has demonstrated good psychometric properties in several previous studies, including good construct validity, internal consistency, factor structure, criterion validity, and measurement invariance across samples (Melka et al., 2011; Spaapen et al., 2014). Relevant for the current study, Gross and John (2003) demonstrated adequate internal consistency for the expressive suppression scale specifically ($\alpha = .73$). Internal consistency for the present study was $\alpha = .81$.

Expression of Emotions. To assess the degree to which participants express positive and negative emotions, as well as how strongly they typically experience emotions, I administered the Berkeley Expressivity Questionnaire (BEQ; Gross & John, 1997). This 16-item scale includes three subscales: expression of negative emotion (e.g., “*Whenever I feel negative emotions, people can easily see exactly what I am feeling*”), expression of positive emotion (e.g., “*Whenever I feel positive emotions, people can*

easily see exactly what I am feeling”), and felt intensity of emotion (e.g., *“I am sometimes unable to hide my feelings, even though I would like to”*). Participants respond using a 7-point Likert-type scale (1 = *strongly disagree*; 7 = *strongly agree*). Negatively worded items were reverse coded. A sum score was created with higher scores indicating more expressivity. This measure has shown been supported, displaying theoretically supported factor structure, good convergent and discriminant validity, and internal consistency ($\alpha = .86$; Gross & John, 1997). Internal consistency of the present study was slightly better at $\alpha = .88$.

Mental Health Outcomes. To assess aggression, the Buss-Perry Aggression Questionnaire – Short Form (BPAQ-SF; Buss & Perry, 1992) was utilized which consists of 12 self-report items that are evenly divided into four subscales: physical aggression (e.g., *“I have threatened people I know.”*), verbal aggression (e.g., *“I often find myself disagreeing with people.”*), anger (e.g., *“I have trouble controlling my temper.”*), and hostility (e.g., *“At times I feel I have gotten a raw deal out of life”*). Participants were asked to respond to each item on a 5-point Likert scale (1 = *extremely uncharacteristic of me*; 5 = *extremely characteristic of me*). A sum score was created for each subscale with higher scores indicating more physical aggression ($\alpha = .76$), verbal aggression ($\alpha = .79$), anger ($\alpha = .75$), and hostility ($\alpha = .74$) respectively. A mean score was also created for total aggression ($\alpha = .88$). Buss and Perry (1992) reported adequate reliability as well (ranging from $\alpha = .72$ to $\alpha = .89$) for all subscales and the total score.

Using the Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983), two specific mental health outcomes were assessed: anxiety and depressive symptoms. The HADS is a 14-item scale that assesses anxiety symptoms related to

anxious thoughts (e.g., “*Worrying thoughts go through my mind*”) and physiological responses (e.g., “*I feel restless as if I have to be on the move.*”) and depressive symptoms related to feelings of depressed mood (e.g., “*I feel as if I am slowed down.*”) and loss of interest or pleasure (e.g., “*I have lost interest in my appearance.*”). Participants reported how they had been feeling over the past week using a 4-point Likert-type scale. Reverse worded items were recoded to reflect higher anxiety and depressive symptoms respectfully. In a review of research using the HADS, the subscales demonstrate good internal consistency with Cronbach’s alphas between .68 to .93 for anxiety and between .67 to .90 for depression (Bjelland et al., 2002). Mean scores were calculated for anxiety ($\alpha = .87$) and depression ($\alpha = .80$).

Well-being was measured using the 5-item version of the World Health Organization Well-Being Index (WHO-5; Topp et al., 2015; World Health Organization, 1998). Participants responded to items related to how they had been feeling over the past two weeks (e.g., “*I have felt calm and relaxed*”) on a 6-point Likert-type scale ranging from *at no time* (0) to *all of the time* (5). Items are summed and multiplied by 4 to correspond with a 0-100 range with higher scores indicating more well-being. Research has found the WHO-5 to meet reliability standards with Cronbach’s alphas between .83 and .93 (Sisicka et al., 2020). In the present study, internal consistency was $\alpha = .89$.

Physical Functioning. The Global Physical Functioning Scale (GPFS; Sorlie et al., 2001) was included to assess general physical functioning. The GPFS is a one-item measure with which participants were asked to rate their physical functioning on a scale from 100 which indicates excellent functioning to 1 which indicates impaired functioning and difficulty completing daily tasks independently. Sorlie and colleagues (2000) found

the GPFS to meet reliability standards in terms of test-retest ($\alpha = .90$) and inter-rater ($\alpha = .82$) reliability and to correctly discriminate between patients at different levels of functioning relevant to other tested measures of physical functioning.

Significant Life Events. Participants reported their experience with significant life events using the Life Event's Checklist (LEC; Gray et al., 2004) which was designed to assess exposure to potentially traumatic events. Participants respond to a list of 17 events using a 5-point nominal scale (1 = *happened to me*; 2 = *witnessed it*; 3 = *learned about it*; 4 = *not sure*; and 5 = *does not apply*). The LEC has been found to be stable over time and correlates with measures of PTSD and other mental health diagnoses including depression and anxiety (Gray et al., 2004).

Overview of Analyses

Prior to conducting the primary analyses, participants were excluded, and missing data was examined following the procedures detailed in Study 1. A dichotomous gender variable (ciswoman, cisman) was also created to assess gender differences. Participants who reported diverse gender identities ($n = 34$) were excluded from these analyses. Then, potential covariates were examined for inclusion. To examine the hypotheses, an independent samples t-test to determine gender differences in emotionality stigma along with a series of bivariate correlations to assess convergent and discriminant validity were conducted. The t-test included the dichotomous gender variable as the independent variable and emotionality stigma entered as the dependent variable. Bivariate correlations between emotionality stigma, emotion concealment, suppression, and expression, mental health (aggression, anxiety, depression, and well-being), physical functioning, and significant life events were conducted using the total sample.

STUDY 2

RESULTS

The purpose of study 2 was to test convergent and discriminant validity and to assess for gender differences in emotionality stigma. Toward convergent validity, positive correlations between the measure of emotionality stigma and constructs theorized to be similar or related were hypothesized (Hypothesis 1). In support of this hypothesis and convergent validity, results revealed significant positive correlations between emotionality stigma and emotion concealment, emotion suppression, aggression, anxiety, and depression (see Table 1 for bivariate correlations). Further, it was hypothesized emotionality stigma would be negatively related to constructs theorized to be dissimilar (Hypothesis 2). Again, results supported convergent validity with significant negative correlations between emotionality stigma and emotion expression and well-being. Finally, and only partially in support of Hypothesis 3 and discriminant validity, emotionality stigma and life events were not significantly correlated while a significant positive relationship between emotionality stigma and physical health emerged. Based on the distinctness of the dimensions of emotionality stigma, post-doc analyses investigating the relationships of these individual dimensions with similar and dissimilar constructs was conducted. These analyses were largely consistent with the findings of the overall scale (Table 2). However, these analyses revealed nuances in

emotionality stigma such that differential treatment, but not stigma endorsement nor resistance, was related to anxiety and physical functioning. Additionally, emotion expression and differential treatment were positively correlated suggesting those with high emotion expression experience more differential treatment. Finally, when broken down by individual dimension, significant correlations with life events emerged such that those who experienced significant life events reported less stigma endorsement, more stigma resistance, and more differential treatment. In line with the results of the EFA from Study 1, these findings suggest that the dimensions of emotionality stigma may represent related, but distinct constructs.

Based on the theory of emotionality stigma (Seely & Mickelson, 2019), it was hypothesized that participants would display different levels of emotionality stigma based on their gender identity (Hypothesis 4). In support this hypothesis and the role of the emotion socialization, gender differences were seen in each dimension of emotionality stigma, though not in emotionality stigma overall (Table 3). Specifically, where men expressed more stigma endorsement and lack of stigma resistance, women reported more experiences of differential treatment. As gender was used as a proxy to the socialization process, post hoc analyses were conducted to explore the role of a more direct measure of this process – endorsement of masculine ideas. To test the role of masculinity, a series of linear regressions were conducted in which gender and masculinity served as independent predictors of emotionality stigma endorsement, resistance, and differential treatment, separately. Results suggested that while endorsement of masculine ideas account for a significant proportion of the variance in emotionality stigma and its dimensions such that those who endorse higher masculinity also report more emotionality stigma endorsement,

resistance, and differential treatment (ΔR^2 ranging from .032 - .109), even when considering masculinity, gender continued to emerge as a significant predictor of emotionality stigma endorsement, resistance, and differential treatment (Table 4).

STUDY 2

DISCUSSION

In further support of the measure of emotionality stigma developed in Study 1, evidence of convergent and discriminant validity was obtained in Study 2. Overall, results illustrate emotionality stigma as a construct positively correlated with emotion concealment and suppression as well as the mental health outcomes of aggression, anxiety, and depression, negatively correlated with emotion expression and well-being, and uncorrelated with the experience of significant life events. However, an unexpected positive relationship between emotionality stigma and physical functioning emerged that contradicted my hypothesis and discriminant validity. Specifically, at higher levels of emotionality stigma, individuals were also more likely to have impaired physical functioning. Notably, these correlations were weak (.13) in comparison with the other significant correlations (all ranging from .18 - .35) suggesting the Emotionality Stigma Scale is still functioning as expected regarding relationships with similar versus dissimilar constructs. Furthermore, although no relationship between emotionality stigma and physical functioning was anticipated, the documented impact of mental health on physical health and vice versa (Ohrnberger et al., 2017; Slavich, 2020) as well as the support for the relationship between emotionality stigma and mental health suggested in this study, might explain the relationship between emotionality stigma and physical

functioning. Furthermore, emotion focused therapeutic interventions have been found to significantly improve physical health (Bach et al., 2019; Greenberg & Goldman, 2019), again supporting the relationship between emotionality and physical health found here. This identified relationship between emotionality and physical functioning also warrants additional research as systems of oppression at play for those experiencing impaired physical functioning likely impact experiences of stigma more generally (Silván-Ferrero et al., 2020). Therefore, assessing emotionality stigma may only be touching on a small aspect of these individuals' stigma experience.

Notably, although the emotionality stigma scale functioned as hypothesized when utilizing the sum score overall, important nuances in the relationship between emotionality stigma dimensions and other constructs were identified. These differences further support the need for continued research. Specifically, future directions include investigating multiple measures of emotionality stigma as unique measures assessing specific aspects of emotionality stigma may be more exact and therefore have better research and clinical utility.

Finally, as hypothesized, while the factor structure remained consistent, gender differences in emotionality stigma emerged. Men and women alike endorsed levels of emotionality stigma overall with no gender differences in total emotionality stigma, but differences were noted in the specific dimensions of emotionality stigma. Men reported higher levels of emotionality stigma endorsement as well as a lack of stigma resistance compared to women. Women, on the other hand, reported higher levels of perceived differential treatment within society based on emotionality. Considering the theorized role of emotion socialization in emotionality stigma, higher levels of stigma endorsement

and lack of stigma resistance in men was expected. Furthermore, sexism continues to be prevalent impacting the way women are treated. Although socialization practices encourage more emotionality and underscore the acceptance of emotionality for women more generally (Boysen & Logan, 2017; Plant et al., 2000), women still experience discrimination based on sex (Coffman et al., 2021; Cundiff & Vescio, 2016; Fischbach et al., 2015; Stamarski & Son Hing, 2015). Emotionality, as a result, has been a target by which these forces of oppression operate (Fischbach et al., 2015) which likely contributes to women's higher reports of differential treatment. While post-hoc analyses revealed a role of masculine ideas – a potentially more direct measure of the outcomes of socialization – in these gender differences, gender still accounted for significant variance in emotionality stigma suggesting there may be additional aspects of the socialization process that contribute to emotionality stigma such as endorsed stereotypes and cultural values. Additionally, where men reported more stigma endorsement and limited resistance, but less differential treatment, those who endorsed conformity to masculine values reported higher emotionality stigma across all three dimensions. While this is expected as those who conform to masculine values would experience higher levels of emotionality stigma based on the theory (Seely, in preparation), this finding further supports the need for additional research investigating other direct measures of the emotion socialization experience that may account for the difference seen between gender and masculinity found here and better explain the cause of these gender differences overall.

GENERAL DISCUSSION

Emotion socialization (see Zeman et al., 2012 for review) and stigma formation (see Corrigan & Watson, 2007; Sickel et al., 2014 for reviews) are two well researched and understood processes. However, research has yet to begin understanding the potential stigmatized beliefs individuals develop and hold based on their emotion socialization experience. Theoretically, Seely (in preparation) proposed stigma around emotionality forms within society as an unintended consequence of emotion socialization. In order to better understand the role this construct – emotionality stigma – plays in an individual’s mental health, a measure needed to be created for use in future research. Toward this end, across two studies, the Emotionality Stigma Scale was developed and tested. The final measure accounts for the three theorized dimensions of emotionality stigma – stigma endorsement, stigma resistance, and differential treatment (Seely, in preparation) – and has met reliability and validity standards in the current studies (AERA et al., 2014). Specifically, all subscales and the total scale showed reliability, with internal consistencies ranging from $\alpha = .81 - .90$ across study 1 and study 2. Furthermore, hypotheses regarding convergent validity were supported such that emotionality stigma was positively correlated with emotion concealment, emotion suppression, aggression, anxiety, and depression, and negatively correlated with emotion expression and well-being. However, results regarding discriminant validity were mixed with emotionality

stigma being unrelated to significant life events, but unexpectedly related to physical health. One explanation for this unexpected relationship is the documented bidirectional connection between physical and mental health (Ohrnberger et al., 2017; Slavich, 2020). As mental health and physical health are often related, it can be deduced that a construct correlated with mental health outcomes would also be correlated with physical health outcomes though to a lesser degree which is supported by the strength of the relationships (see Table 1).

The current studies also illustrated gender differences in the individual dimensions of emotionality stigma. Where men reported higher levels of endorsement and lower levels of resistance, women reported more differential treatment. Given the expectations of emotionality in society and the negative ramifications that can be associated with emotionality depending on gender identity, these results are consistent with ideas proposed in past research. While emotion expression in women is more accepted than in men (Boysen & Logan, 2017; Plant et al., 2000) likely increasing stigmatized beliefs in men specifically, the adverse impact of emotion expression in terms of both societal views and career advancement are often greater for women due to sexism likely contributing to increased experience of differential treatment (Coffman et al., 2021; Cundiff & Vescio, 2016; Fischbach et al., 2015; Starnski & Son Hing, 2015). Of note, masculinity was assessed as a differentiator in endorsed emotionality stigma experience as well. Results suggest masculinity as a significant contributor to the emotionality stigma experience but reveal additional variance still accounted for by gender suggesting there may be additional contributing factors such as held beliefs and cultural values. As gender here served as a binary proxy to the socialization experience,

future research should examine other measures of the socialization experience such as parent socialization practices to gain a better understanding of the specific components of this process that relate to emotionality stigma across the gender spectrum.

Emotionality stigma is proposed to be highly influenced by the socialization process (Seely, in preparation), which is shown to shift based on identity including race, ethnicity, and gender (Friedlmeier et al., 2011; Kennedy Root & Denham, 2010). Additionally, the Emotionality Stigma Scale touches on stigmatization that likely overlaps with these identities. For example, differential treatment based on emotionality is likely tied to other forces of oppression associated with marginalized and minoritized identities. In addition to findings related to gender differences, the relationships between emotionality stigma and both mental and physical health pose question as to how much of an individual's overall stigma experience is being accounted for by emotionality stigma specifically versus overlapping with other stigma experienced based on mental or physical health. Taken together, understanding the unique contribution of emotionality stigma while intentionally considering other stigmatized experiences will be an important avenue for future research. Importantly, the Emotionality Stigma Scale is not intended to displace the role of identity in stigmatization, but instead to act as a tool by which to gain a better understanding of the vast impacts of these identities in an individual's lived experience and mental health.

Strengths and Limitations

The current study has many strengths including the use of multiple large, representative samples and supported measurement development processes. Both studies incorporated data from two samples representative of college students and the general

population increasing the generalization of the presented results. Furthermore, the studies' sample sizes and even split between men and women allowed adequate power to examine the proposed hypotheses. The development of the Emotionality Stigma Scale also consisted of practices advised by the American Educational Research Association, American Psychological Association, and National Council on Measurement in Education (2014) including incorporating a theoretical basis, utilizing previously validated measures to aid in the creation of the new scale, expert review of the measure theory and item development, as well as reliability and validity testing.

Along with the many strengths, come limitations that should be addressed in future research and considered when interpreting the current findings. First, although the items were reviewed by a diverse research lab, the Emotionality Stigma Scale development lacked a full bias review panel. As such, the measure in its current form may overlook certain aspects of emotionality stigma in its full representation. Future research should not only investigate emotionality stigma in different groups, but should also include measurement invariance testing across populations as well as open feedback from participants regarding their understanding of the measure and each items meaning (AERA et al., 2014). Additionally, only individuals identifying as men or women were included in the present analyses due to power restrictions, limiting generalization to gender overall. Gender is utilized as a proxy to the socialization experience which is imperfect. While the conceptualization of gender differences in emotionality stigma highlights unique experiences of oppressed groups which serves an important role in studying ethnocultural diversity (Hall et al., 2016), exploration of other variables relevant to the socialization experience is necessary to gain a better understanding of this diverse

experience. Given these limitations related to gender, it is recommended that future research identify and utilize additional measures of the socialization process and commit to gaining gender diverse perspectives and reports. Finally, the current studies are cross-sectional and correlational; therefore, claims about temporality and directionality cannot be made. Longitudinal designs are recommended in the future to explore both test-retest reliability as well as to investigate the effect of intervention. Eventually, a long-term study assessing emotion socialization practices during childhood and changes in emotionality stigma endorsement and mental health overtime would be ideal.

Implications for Research and Practice

These studies are the first to create and test a measure of stigmatized beliefs around everyday emotionality. As initial development and testing showed promise in the relevance of this construct, vast new research avenues exist to build empirical support for this measure's use in both research and practice. Considering the limitations of this study, the most immediate future direction consists of continued reliability and validity testing including assessing predictive validity, investigating test-retest reliability, and exploring the measure's factor structure in additional populations (AERA et al., 2014). Relatedly, empirically and theoretically exploring the role of emotionality stigma as well as the different presentations of this construct based on diverse identities is warranted toward eventually adapting this measure for use in alternative populations and settings.

Beyond this, further research avenues include exploring the relationship between emotionality stigma, emotion regulation practices, and mental and physical health outcomes and investigating the relevance of this construct for use in clinical work to better understand precipitating factors related to clients mental health as well as a

mechanism of change. Future research would also benefit from additional exploration of the theory of emotionality stigma and potentially the creation of additional measures to assess specific types and purposes of emotion expression. Emotional expression is a form of communication (Koole, 2009). When people express emotions it draws the attention of others to the person and what they are feeling. Therefore, the purpose of emotion expression may be different in different circumstances and likely shift based on social identities as well. Relatedly, as specific emotions are more stigmatized than others in certain groups (Boysen & Logan, 2017; Chandra & Minkovitz, 2006; Topkaya, 2014; Wang et al., 2007), the ability to measure these differences could be meaningful. Empirical investigation of the relationship between social norms, systems of oppression, the socialization process, and emotionality stigma are also needed. Theoretically, emotionality stigma is proposed to be an outcome of these social factors (Seely, in preparation). Investigating this through both qualitative and quantitative research is an important next step. Ideally, future research would investigate the development of emotionality stigma as well. As it is theorized that emotionality stigma develops based on the socialization process, it would make sense that it would fluctuate throughout development. Understanding this fluctuation could be key in early intervention and prevention efforts.

Although additional research is needed before the Emotionality Stigma Scale is recommended for implementation in practice, the future clinical applications of this scale are worth noting. If further research supports the theory of emotionality stigma and the Emotionality Stigma Scale, based on the theorized relationship between emotionality stigma and mental health, this scale may serve as a meaningful measure to aid in case

conceptualization and treatment planning as well as to track change in clients. For example, having insight that someone is experiencing emotionality stigma could help a clinician better understand the presenting problem and engage in targeted treatment in which beliefs about emotionality are explored and potentially challenged. There are many interventions that could be uniquely beneficial for individuals presenting with emotionality stigma. For example, Emotion-Focused Therapy (EFT) centers the importance of emotionality in identity development and functioning more generally and has been shown to be highly effective with various populations (Greenberg, 2004; Greenberg & Goldman, 2019). Dialectical Behavioral Therapy (DBT; Linehan, 1993) is another potential treatment option. In fact, the biosocial theory on which DBT is built (Linehan, 1993) posits that emotional invalidation is a primary cause of dysregulation and mental health concerns which is aligned with the theory of emotionality stigma. The emotion regulation module in DBT may be particularly beneficial as it focuses on building a client's understanding of their own emotions and decreasing discomfort with emotionality (Linehan, 2015; Rathus & Miller, 2015). Eventually, the development of specific intervention and prevention strategies that can be disseminated in individual practice as well as in group or community environments may be warranted. Finally, as emotionality stigma is theorized to be a product of the socialization process and to overlap with social identities and the role of oppression in society, along with the importance of ongoing efforts toward dismantling systems of oppression, additional advocacy efforts toward improving the socialization process and normalizing emotion experiences and expression may aid in decreasing the proposed role of emotionality stigma in perpetuating mental health issues in society.

CONCLUSION

Emotionality stigma has been proposed as an iatrogenic effect of the emotion socialization process that may lead to increased concealment and perpetuate mental health issues (Seely & Mickelson, 2019; Seely, in preparation). In the current study, the first measure of emotionality stigma was developed and tested. Results were promising, confirming the theorized dimensions of emotionality stigma as well as illustrating the proposed relationships with similar and dissimilar constructs. Expected gender differences also emerged suggesting that emotionality stigma indeed overlaps with identify factors in important ways which remains an important avenue for future research. In post-hoc analyses, masculinity also emerged as a significant predictor of emotionality stigma, though gender continued to account for significant variance in emotionality stigma suggesting there may be additional components of the socialization process that are not covered by conformity to masculine ideals. Through continued empirical and theoretical work, emotionality stigma has the potential to serve as a meaningful construct in regard to research and practice in the field of psychology as well as advocacy efforts within society more generally.

REFERENCES

- Adler, N. E., & Stewart, J. (2007). *The MacArthur Scale of Subjective Social Status*.
<http://www.macses.ucsf.edu/research/psychosocial/subjective.php>
- Akaike, H. (1974). A new look at the statistical model identification. *IEEE Transactions on Automatic Control*, *19*, 716–723. <https://doi.org/10.1109/TAC.1974.1100705>
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for educational and psychological testing*. American Educational Research Association.
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders. In *American Psychiatric Association* (5th ed.). American Psychological Association.
- Bach, D., Groesbeck, G., Stapleton, P., Sims, R., Blickheuser, K., & Church, D. (2019). Clinical EFT (Emotional Freedom Techniques) improves multiple physiological markers of health. *Journal of Evidence-Based Integrative Medicine*, *24*, 1–12.
<https://doi.org/10.1177/2515690X18823691>
- Barbee, H., & Schrock, D. (2019). Un/gendering social selves: How nonbinary people navigate and experience a binarily gendered world. *Sociological Forum*, *34*(3), 572–593. <https://doi.org/10.1111/socf.12517>
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological*

- Bulletin*, 107, 238–246.
- Bentler, P. M. (2006). *EQS structural equations program manual*. Multivariate Software.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588–606.
<https://doi.org/10.1037/0033-2909.88.3.588>
- Berger, B. E., Ferrans, C. E., & Lashley, F. R. (2001). Measuring stigma in people with HIV: Psychometric assessment of the HIV Stigma Scale. *Research in Nursing & HealthHealth*, 24, 518–529. <https://doi.org/10.1002/nur.10011>
- Bjelland, I., Dahl, A. A., Haug, T. T., & Neckelmann, D. (2002). The validity of the Hospital Anxiety and Depression Scale. *Journal of Psychosomatic Research*, 52, 69–77. [https://doi.org/10.1016/s0022-3999\(01\)00296-3](https://doi.org/10.1016/s0022-3999(01)00296-3)
- Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: A primer. *Frontiers in Public Health*, 6(149), 1–18.
<https://doi.org/10.3389/fpubh.2018.00149>
- Bos, A. E. R., Pryor, J. B., Reeder, G. D., & Stutterheim, S. E. (2013). Stigma: Advances in theory and research. *Basic and Applied Social Psychology*, 35(1), 1–9.
<https://doi.org/10.1080/01973533.2012.746147>
- Boysen, G. A., & Logan, M. (2017). Gender and mental illness stigma: The relative impact of stereotypical masculinity and gender atypicality. *Stigma and Health*, 2(2), 83–97. <https://doi.org/10.1037/sah0000044>
- Brody, L. R. (1999). *Gender, emotion, and the family*. Harvard University Press.
- Brohan, E., Slade, M., Clement, S., & Thornicroft, G. (2010). Experiences of mental

- illness stigma, prejudice and discrimination: A review of measures. *BMC Health Services Research*, 10, 80. <https://doi.org/10.1186/1472-6963-10-80>
- Burnham, K. P., & Anderson, D. R. (2002). *Model selection and multimodel inference* (2nd ed.). Springer.
- Buss, A. H., & Perry, M. (1992). The Aggression Questionnaire. *Journal of Personality and Social Psychology*, 63(3), 452–459. <https://doi.org/10.1037/0022-3514.63.3.452>
- Chandra, A., & Minkovitz, C. S. (2006). Stigma starts early: Gender differences in teen willingness to use mental health services. *Journal of Adolescent Health*, 38(6), 1–8. <https://doi.org/10.1016/j.jadohealth.2005.08.011>
- Chaplin, T. M., & Aldao, A. (2013). Gender differences in emotion expression in children: A meta-analytic review. *Psychological Bulletin*, 139(4), 735–765. <https://doi.org/10.1037/a0030737>
- Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., Morgan, C., Rüsch, N., Brown, J. S. L., & Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine*, 45, 11–27. <https://doi.org/10.1017/S0033291714000129>
- Coffman, K. B., Exley, C. L., & Niederle, M. (2021). The role of beliefs in driving gender discrimination. *Management Science*, 67(6), 3551–3569. <https://doi.org/10.1287/mnsc.2020.3660>
- Corrigan, P. W., & Watson, A. C. (2007). How children stigmatize people with mental illness. *International Journal of Social Psychiatry*, 53, 526–546. <https://doi.org/10.1177/0020764007078359>

- Cramer, K. M., & Barry, J. E. (1999). Psychometric properties and confirmatory factor analysis of the Self-Concealment Scale. *Personality and Individual Differences*, 27(4), 629–637. [https://doi.org/10.1016/S0191-8869\(98\)00222-0](https://doi.org/10.1016/S0191-8869(98)00222-0)
- Cundiff, J. L., & Vescio, T. K. (2016). Gender stereotypes influence how people explain gender disparities in the workplace. *Sex Roles*, 75(3–4), 126–138. <https://doi.org/10.1007/s11199-016-0593-2>
- Drabish, K., & Theeke, L. A. (2022). Health impact of stigma, discrimination, prejudice, and bias experienced by transgender people: A systematic review of quantitative studies. *Issues in Mental Health Nursing*, 43(2), 111–118. <https://doi.org/10.1080/01612840.2021.1961330>
- Ersoy, M. A., & Varan, A. (2007). Reliability and validity of the Turkish version of the Internalized Stigma of Mental Illness Scale. *Turkish Journal of Psychiatry*, 18(2), 1–7. <https://doi.org/10.1186/s12888-016-0825-6>
- Fabes, R. A., Poulin, R. E., Eisenberg, N., & Madden-Derdich, D. A. (2002). The Coping with Children's Negative Emotions Scale (CCNES): Psychometric properties and relations with children's emotional competence. *Marriage & Family Review*, 34(3–4), 285–310.
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175–191.
- Fischbach, A., Lichtenthaler, P. W., & Horstmann, N. (2015). Leadership and gender stereotyping of emotions: Think manager-think male? *Journal of Personnel Psychology*, 14(3), 153–162. <https://doi.org/10.1027/1866-5888/a000136>

- Forgeard, M. J. C., Pearl, R. L., Cheung, J., Rifkin, L. S., Beard, C., & Björgvinsson, T. (2016). Positive beliefs about mental illness: Associations with sex, age, diagnosis, and clinical outcomes. *Journal of Affective Disorders, 204*, 197–204.
<https://doi.org/10.1016/j.jad.2016.06.038>
- Friedlmeier, W., Corapci, F., & Cole, P. M. (2011). Emotion socialization in cross-cultural perspective. *Social and Personality Psychology Compass, 5*(7), 410–427.
<https://doi.org/10.1111/j.1751-9004.2011.00362.x>
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Prentice-Hall, Inc.
- Gray, M. J., Litz, B. T., Hsu, J. L., & Lombardo, T. W. (2004). Psychometric properties of the life events checklist. *Assessment, 11*(4), 330–341.
<https://doi.org/10.1177/1073191104269954>
- Greenberg, L. S. (2004). *Emotion – focused Therapy. 16*, 3–16.
- Greenberg, L. S., & Goldman, R. N. (Eds.). (2019). *Clinical handbook of emotion-focused therapy*. American Psychological Association.
- Gross, J. J., & John, O. P. (1997). Revealing feelings: Facets of emotional expressivity in self-reports, peer ratings, and behavior. *Journal of Personality and Social Psychology, 72*, 435–448.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology, 85*(2), 348–362. <https://doi.org/10.1037/0022-3514.85.2.348>
- Guo, J., Mrug, S., & Knight, D. C. (2017). Factor structure of the Emotions as a Child

- Scale in late adolescence and emerging adulthood. *Psychological Assessment*, 29(9), 1082–1095. <https://doi.org/10.1037/pas0000412>
- Halberstadt, A. G., Cassidy, J., Stifter, C. A., Parke, R. D., & Fox, N. A. (1995). Self-Expressiveness within the Family Context: Psychometric support for a new measure. *Psychological Assessment*, 7(1), 93–103. <https://doi.org/10.1037/1040-3590.7.1.93>
- Hall, G. C., Yip, T., & Zárate, M. A. (2016). On becoming multicultural in a monocultural research world: A conceptual approach to studying ethnocultural diversity. *American Psychologist*, 71(1), 40–51. <https://doi.org/10.1037/a0039734>
- Horner, C. G., & Wallace, T. L. (2013). Measuring emotion socialization in schools. *Journal of School Health*, 83(10), 697–703. <https://doi.org/10.1111/josh.12083>
- Hu, L., & Bentler, P. M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Kennedy Root, A., & Denham, S. A. (2010). The role of gender in the socialization of emotion: Key concepts and critical issues. In *New directions for child and adolescent development* (Issue 128, pp. 68–91). Wiley Periodicals, Inc. <https://doi.org/10.1002/cd.265>
- King, M., Dinos, S., Shaw, J., Watson, R., Stevens, S., Passetti, F., Weich, S., & Serfaty, M. (2007). The Stigma Scale: Development of a standardised measure of the stigma of mental illness. *British Journal of Psychiatry*, 190, 248–254. <https://doi.org/10.1192/bjp.bp.106.024638>
- Kondrat, D. C., Sullivan, W. P., Wilkins, B., Barrett, B. J., & Beerbower, E. (2018). The mediating effect of social support on the relationship between the impact of

- experienced stigma and mental health. *Stigma and Health*, 3(4), 305–314.
<https://doi.org/10.1037/sah0000103>
- Koole, S. L. (2009). The psychology of emotion regulation: An integrative review. *Cognition and Emotion*, 23(1), 4–41. <https://doi.org/10.1080/02699930802619031>
- Kyriazos, T. (2018). Applied psychometrics: Sample size and sample power considerations in factor analysis (EFA, CFA) and SEM in general. *Psychology*, 9, 2207–2230. <https://doi.org/10.4236/psych.2018.98126>.
- Lacey, M., Paolini, S., Hanlon, M. C., Melville, J., Galletly, C., & Campbell, L. E. (2015). Parents with serious mental illness: Differences in internalised and externalised mental illness stigma and gender stigma between mothers and fathers. *Psychiatry Research*, 225, 723–733. <https://doi.org/10.1016/j.psychres.2014.09.010>
- Ladouceur, C. D., Reid, L., & Jacques, A. (2002). Construction and validation of the Parents' Reaction to Children's Positive Emotions Scale. *Canadian Journal of Behavioral Science*, 34(1), 8–18.
- Larson, D. G., & Chastain, R. L. (1990). Self-Concealment: Conceptualization, Measurement, and Health Implications. *Journal of Social and Clinical Psychology*, 9(4), 439–455. <https://doi.org/10.1521/jscp.1990.9.4.439>
- Larson, D. G., Chastain, R. L., Hoyt, W. T., & Ayzenberg, R. (2015). Self-Concealment: Integrative Review and Working Model. *Journal of Social and Clinical Psychology*, 34(8), 705–e774. <https://doi.org/10.1521/jscp.2015.34.8.705>
- Linehan, M. M. (1993). *Skills training manual for treating Borderline Personality Disorder*. The Guilford Press.
- Linehan, M. M. (2015). *DBT skills training manual*. The Guilford Press.

- Little, R. J. A. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, *83*(404), 1198–1202. <https://doi.org/10.1080/01621459.1988.10478722>
- Logie, C. H., Earnshaw, V., Nyblade, L., Turan, J., Stangl, A., Poteat, T., Nelson, L. R., & Baral, S. (2021). A scoping review of the integration of empowerment-based perspectives in quantitative intersectional stigma research. *Global Public Health*, *0*(0), 1–16. <https://doi.org/10.1080/17441692.2021.1934061>
- Lovakov, A., & Agadullina, E. R. (2021). Empirically derived guidelines for effect size interpretation in social psychology. *European Journal of Social Psychology*, *51*(3), 485–504. <https://doi.org/10.1002/ejsp.2752>
- Luo, J., Wang, M. C., Gao, Y., Deng, J., & Qi, S. S. (2020). Factor structure and construct validity of the Emotions as a Child Scale (EAC) in Chinese children. *Psychological Assessment*, *32*(1), 85–97. <https://doi.org/10.1037/pas0000762>
- Magai, C. (1996). Emotions as a Child. In *Unpublished Measure*. Long Island University.
- Mahalik, J. R., Locke, B. D., Ludlow, L. H., Diemer, M. A., Scott, R. P. J., Gottfried, M., & Freitas, G. (2003). Development of the Conformity to Masculine Norms Inventory. *Psychology of Men & Masculinity*, *4*(1), 3–25. <https://doi.org/10.1037/1524-9220.4.1.3>
- McGarrity, L. A., Huebner, D. M., & McKinnon, R. K. (2013). Putting stigma in context: Do perceptions of group stigma interact with personally experienced discrimination to predict mental health? *Group Processes and Intergroup Relations*, *16*(6), 684–698. <https://doi.org/10.1177/1368430213475675>
- Meade, A. W., Johnson, E. C., & Braddy, P. W. (2008). Power and sensitivity of

- alternative fit indices in tests of measurement invariance. *Journal of Applied Psychology*, 93(3), 568–592. <https://doi.org/10.1037/0021-9010.93.3.568>
- Melka, S. E., Lancaster, S. L., Bryant, A. R., & Rodriguez, B. F. (2011). Confirmatory factor and measurement invariance analyses of the emotion regulation questionnaire. *Journal of Clinical Psychology*, 67, 1283–1293. <https://doi.org/10.1002/jclp.20836>
- Mundfrom, D. J., Shaw, D. G., & Ke, T. L. (2005). Minimum Sample Size Recommendations for Conducting Factor Analyses. *International Journal of Testing*, 5(2), 159–168. https://doi.org/10.1207/s15327574ijt0502_4
- Ohrnberger, J., Fichera, E., & Sutton, M. (2017). The relationship between physical and mental health: A mediation analysis. *Social Science and Medicine*, 195, 42–49. <https://doi.org/10.1016/j.socscimed.2017.11.008>
- Parent, M. C. (2013). Handling item-level missing data: Simpler is just as good. *The Counseling Psychologist*, 41(4), 568–600. <https://doi.org/10.1177/0011000012445176>
- Parker, R., & Aggleton, P. (2003). HIV and AIDS-related stigma and discrimination: A conceptual framework and implications for action. *Social Science and Medicine*, 57(1), 13–24. [https://doi.org/10.1016/S0277-9536\(02\)00304-0](https://doi.org/10.1016/S0277-9536(02)00304-0)
- Pederson, E. L., & Vogel, D. L. (2007). Male gender role conflict and willingness to seek counseling: Testing a mediation model on college-aged men. *Journal of Counseling Psychology*, 54(4), 373–384. <https://doi.org/10.1037/0022-0167.54.4.373>
- Plant, E. A., Hyde, J. S., Keltner, D., & Devine, P. G. (2000). The gender stereotyping of emotions. *Psychology of Women Quarterly*, 24(1), 81–92. <https://doi.org/10.1111/j.1471-6402.2000.tb01024.x>

- Rathus, J. H., & Miller, A. L. (2015). *DBT Skills Manual for Adolescents*. The Guilford Press.
- Rehm, J., & Shield, K. D. (2019). Global burden of disease and the impact of mental and addictive disorders. *Current Psychiatry Reports, 21*(2).
<https://doi.org/10.1007/s11920-019-0997-0>
- Ritsher, J. B., Otilingam, P. G., & Grajales, M. (2003). Internalized stigma of mental illness: Psychometric properties of a new measure. *Psychiatry Research, 121*(1), 31–49. <https://doi.org/10.1016/j.psychres.2003.08.008>
- Safdar, S., Friedlmeier, W., Matsumoto, D., Yoo, S. H., Kwantes, C. T., Kakai, H., & Shigemasa, E. (2009). Variations of emotional display rules within and across cultures: A comparison between Canada, USA, and Japan. *Canadian Journal of Behavioral Science, 41*(1), 1–10. <https://doi.org/10.1037/a0014387>
- Seely, H. D., & Mickelson, K. D. (2021). Role of gender and emotionality stigma in perceived parental emotion dysregulation and adult children's internalizing symptoms. *Sex Roles, 85*, 515–527. <https://doi.org/10.1007/s11199-021-01237-2>
- Sickel, A. E., Seacat, J. D., & Nabors, N. A. (2014). Mental health stigma update: A review of consequences. *Advances in Mental Health, 12*(3), 202–215.
<https://doi.org/10.1080/18374905.2014.11081898>
- Silvan-Ferrero, P., Recio, P., Molero, F., & Nouvilas-Palleja, E. (2020). Psychological quality of life in people with physical disability: The effect of internalized stigma, collective action and resilience. *International Journal of Environmental Research and Public Health, 17*(5). <https://doi.org/10.3390/ijerph17051802>
- Sinnard, M. T., Budge, S. L., & Rossman, H. K. (2022). Nonbinary individuals'

emotional experiences: Implications for advancing counseling psychology beyond the binary. *Counselling Psychology Quarterly*, 35(1), 19–42.

<https://doi.org/10.1080/09515070.2021.1940102>

Sischka, P. E., Costa, A. P., Steffgen, G., & Schmidt, A. F. (2020). The WHO-5 well-being index – validation based on item response theory and the analysis of measurement invariance across 35 countries. *Journal of Affective Disorders Reports*, 1(August), 100020. <https://doi.org/10.1016/j.jadr.2020.100020>

Slavich, G. M. (2020). Psychoneuroimmunology of stress and mental health. In K. . Harkness & E. . Hayden (Eds.), *The Oxford handbook of stress and mental health* (pp. 519–545). Oxford University Press.

Solar, O., & Irwin, A. (2010). A conceptual framework for action on the social determinants of health. In *Social Determinants of Health Discussion Paper 2 (Policy and Practice)*. World Health Organization.

http://www.who.int/sdhconference/resources/ConceptualframeworkforactiononSDH_eng.pdf

Sorlie, T., Sexton, H. C., Busund, R., & Sorlie, D. (2001). A global measure of physical functioning: psychometric properties. *Health Services Research*, 36(6 Pt 1), 1109–1124.

Spaapen, D. L., Waters, F., Brummer, L., Stopa, L., & Bucks, R. S. (2014). The emotion regulation questionnaire: validation of the ERQ-9 in two community samples. *Psychological Assessment*, 26(1), 46–54. <https://doi.org/10.1037/a0034474>

Spurgeon, S. L. (2017). Evaluating the unintended consequences of assessment practices: Construct irrelevance and construct underrepresentation. *Measurement and*

Evaluation in Counseling and Development, 50(4), 275–281.

<https://doi.org/10.1080/07481756.2017.1339563>

Stamarski, C. S., & Son Hing, L. S. (2015). Gender inequalities in the workplace: the effects of organizational structures, processes, practices, and decision makers' sexism. *Frontiers in Psychology*, 6(September), 1–20.

<https://doi.org/10.3389/fpsyg.2015.01400>

Stangl, A. L., Earnshaw, V. A., Logie, C. H., Van Brakel, W., Simbayi, L. C., Barré, I., & Dovidio, J. F. (2019). The Health Stigma and Discrimination Framework: A global, crosscutting framework to inform research, intervention development, and policy on health-related stigmas. *BMC Medicine*, 17(1), 18–23.

<https://doi.org/10.1186/s12916-019-1271-3>

Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research*, 25(2), 173–180.

https://doi.org/10.1207/s15327906mbr2502_4

Tanabe, Y., Hayashi, K., & Ideno, Y. (2016). The Internalized Stigma of Mental Illness (ISMI) scale: Validation of the Japanese version. *BMC Psychiatry*, 16(1), 1–8.

<https://doi.org/10.1186/s12888-016-0825-6>

Topkaya, N. (2014). Gender, self-stigma, and public stigma in predicting attitudes toward psychological help-seeking. *Educational Sciences: Theory & Practice*, 14(2), 480–488. <https://doi.org/10.12738/estp.2014.2.1799>

Topp, C. W., Østergaard, S. D., Søndergaard, S., & Bech, P. (2015). The WHO-5 well-being index: A systematic review of the literature. *Psychotherapy and Psychosomatics*, 84(3), 167–176. <https://doi.org/10.1159/000376585>

- Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, *38*, 1–10. <https://doi.org/10.1007/BF02291170>
- Vijlbrief, A., Saharso, S., & Ghorashi, H. (2020). Transcending the gender binary: Gender non-binary young adults in Amsterdam. *Journal of LGBT Youth*, *17*(1), 89–106. <https://doi.org/10.1080/19361653.2019.1660295>
- Vogel, D. L., Heimerdinger-Edwards, S. R., Hammer, J. H., & Hubbard, A. (2011). “Boys don’t cry”: Examination of the links between endorsement of masculine norms, self-stigma, and help-seeking attitudes for, men from diverse backgrounds. *Journal of Counseling Psychology*, *58*(3), 368–382. <https://doi.org/10.1037/a0023688>
- Wang, J., Fick, G., Adair, C., & Lai, D. (2007). Gender specific correlates of stigma toward depression in a Canadian general population sample. *Journal of Affective Disorders*, *103*(1–3), 91–97. <https://doi.org/10.1016/j.jad.2007.01.010>
- World Health Organization. (1998). *Well-Being measures in primary health care: the Dep-Care Project. WHO Regional Office for Europe, Copenhagen.*
- Zeman, J., Cassano, M., & Adrian, M. C. (2012). Socialization influences on children’s and adolescents’ emotional self-regulation -processes. In *Handbook of Self-Regulatory Processes in Development, New Directions and International Perspectives Routledge*. <https://doi.org/10.4324/9780203080719.ch5>
- Zigmond, A. S., & Snaith, R. P. (1983). The Hospital Anxiety and Depression Scale. *Acta Psychiatrica Scandinavica*, 361–370. <https://doi.org/10.1093/occmed/kqu024>

Table 1Means₂ Standard Deviations₂ and Bivariate Correlations of Major Variables in SamQle 2

Measure	1	2	3	4	5	6	7	8	9	10
1. Emotionality Stigma										
2. Emotion Concealment	.33***	-								
3. Emotion Suppression	.32***	.38***								
4. Emotion Expression	-.18***	-.09**	-.56***							
5. Aggression	.35***	.37***	.12***	.14***						
6. Anxiety	.23***	.41***	.13***	.25***	.42***					
7. Depression	.33***	.40***	.25***	-.05	.37***	.57***				
8. Well-Being	-.22***	-.34***	-.15***	-.05	-.37***	-.59***	-.71***			
9. Physical Functioning	.13***	.29***	.10**	.06	.27***	.33***	.46***	-.44***		
10. Significant Life Events	-.03	.07*	.01	.03	.09**	.12***	.08*	-.09**	.14***	
Mean	58.26	27.97	15.60	71.95	29.70	16.13	12.64	54.00	2.65	0.93
Standard Deviation	11.35	10.47	5.48	16.22	11.08	4.85	3.87	22.56	0.96	0.25
Range	30-120	10-50	4-28	16-112	12-72	7-28	7-28	0-100	1-5	0-1

Table 2Bivariate Correlations by Emotionality Stigma Domain in Sample 2

Measure	Emotionality Stigma Domains		
	Endorsement	Resistance	Differential Treatment
1. ES Endorsement	—		
2. ES Resistance	.52***	—	
3. ES Differential Treatment	.29***	.03	—
4. Emotion Concealment	.21***	.14***	.31***
5. Emotion Suppression	.27***	.23***	.19***
6. Emotion Expression	-.27***	-.35***	.12***
7. Aggression	.24***	.13***	.32***
8. Anxiety	.01	-.05	.40***
9. Depression	.19***	.18***	.30***
10. Well-Being	-.03	-.08*	-.28***
11. Physical Functioning	.03	.06	.15***
12. Life Events	-.10**	-.12***	.10***

Table 3Gender Differences in Emotionality Stigma

	<i>t</i> (<i>df</i>)	95% CI
Stigma Endorsement	4.32 (783) ***	0.89 – 2.36
Stigma Resistance	4.95 (783) ***	0.90 – 2.09
Differential Treatment	-4.54 (783) ***	-3.38 – -1.34
Emotionality Stigma Total	0.88 (783)	-0.93 – 2.45

Table 4
Post Hoc Investigation of the Role of Masculinity in Gender Differences

	Stigma Endorsement		Stigma Resistance		Differential Treatment		Emotionality Stigma Total	
	<i>B (SE)</i>	ΔR^2	<i>B (SE)</i>	ΔR^2	<i>B (SE)</i>	ΔR^2	<i>B (SE)</i>	ΔR^2
Model 1		.023		.030		.027		.002
Gender	-1.61 (.38) ***		-1.48 (.30) ***		2.40 (.52) ***		-0.69 (.87)	
Model 2		.061		.102		.032		.109
Gender	-1.22 (.37) ***		-1.08 (.29) ***		2.79 (.52) ***		0.50 (.83)	
Masculinity	0.30 (.04) ***		0.31 (.03) ***		0.30 (.06) ***		0.91 (.09) ***	

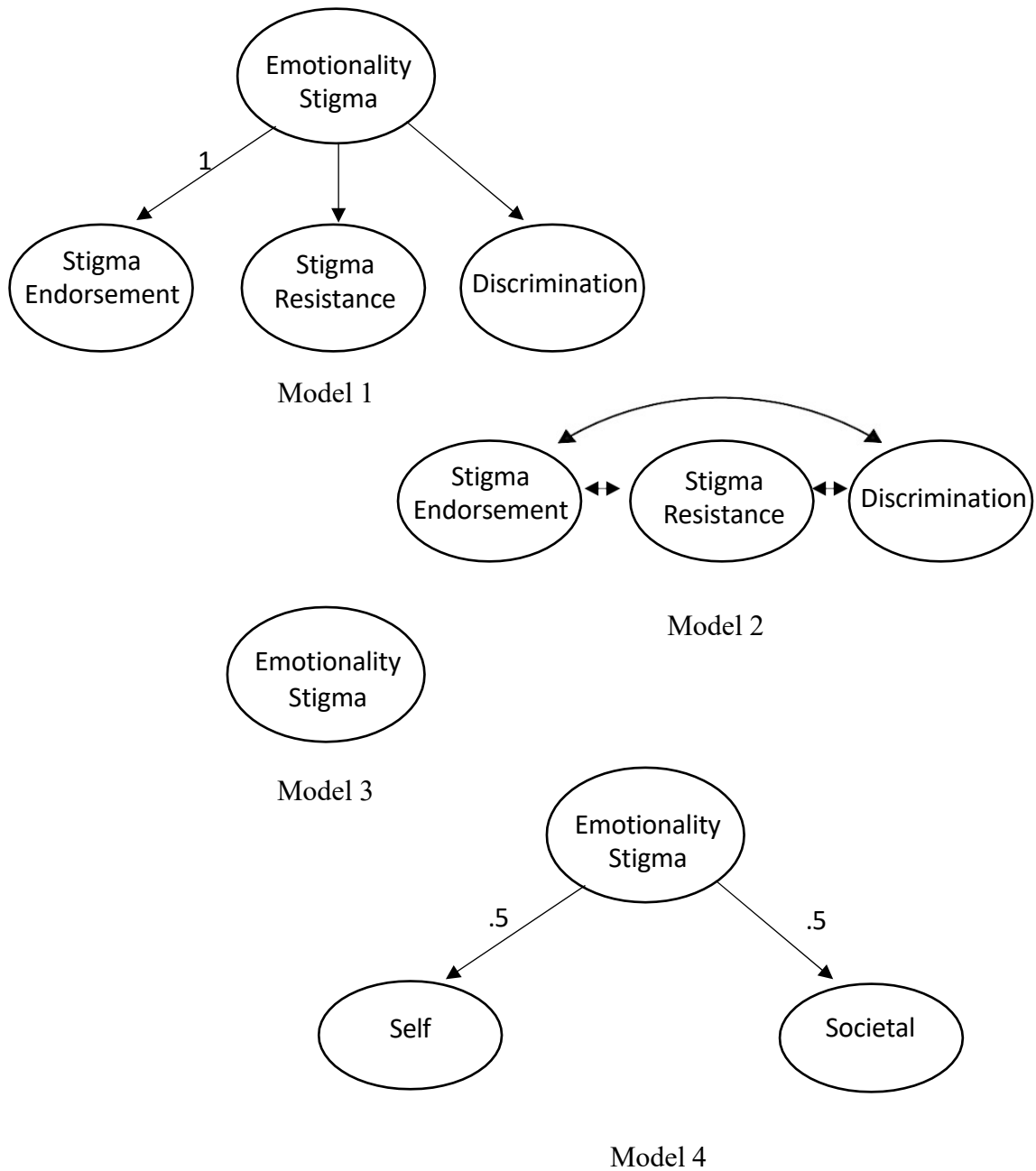


Figure 1. Measurement Model Depictions

Note. Models depictions do not include specific items. For items that load onto each indicated factor – stigma endorsement, stigma resistance, and differential treatment – see Appendix F. Model 3 includes all items loading onto one factor. Model 4 combines the theorized stigma endorsement and stigma resistance subscale items into one factor.

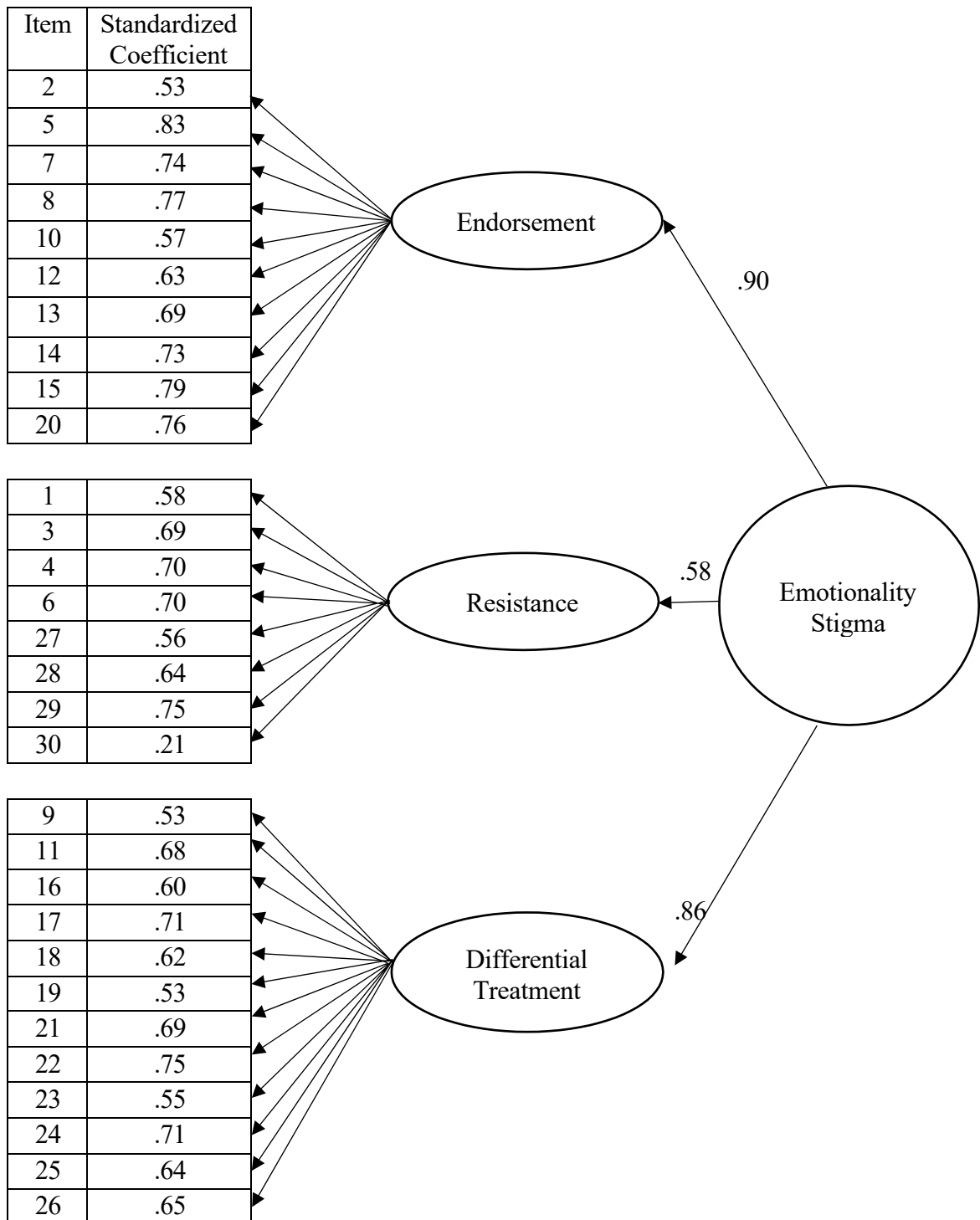


Figure 2. CFA Factor Loadings for Model 1 in Sample 1

Note. Item number corresponds with Appendix F. All observed variables significantly load onto their theorized latent variable. Covariance between all latent variables indicate significant relationships, though resistance illustrated a weaker correlation.

APPENDICES

APPENDIX A

Adapted from the Internalized Stigma of Mental Illness Scale (Ritsher et al., 2003) and the Positive Beliefs about Mental Illness Scale (Forgeard et al., 2016)

Please indicate to what extent you agree or disagree with the following statements (1 = strongly disagree; 4 = strongly agree).

1. Emotions let people think in interesting and insightful ways. *
2. Emotions make people less productive.
3. Emotions allow people to be imaginative and/or creative. *
4. Emotions have some negative consequences.
5. Emotions have made my life more meaningful. *
6. Emotions are a source of weakness.
7. Emotions makes me unique *
8. People should feel out of place in the world if they are emotional.
9. Emotions spoil peoples' lives.
10. People who are not emotional could not possibly understand someone who is emotional.
11. People feel embarrassed or ashamed when they are emotional.
12. People who are emotional should be disappointed in themselves for being emotional.
13. People who are emotional feel inferior to others who are not emotional.
14. Stereotypes about emotionality are valid.
15. People can tell when someone is emotional by the way they look.
16. Emotional people tend to be violent.
17. When people are emotional, they need others to make most decisions for them.
18. Emotional people cannot live a good, rewarding life.

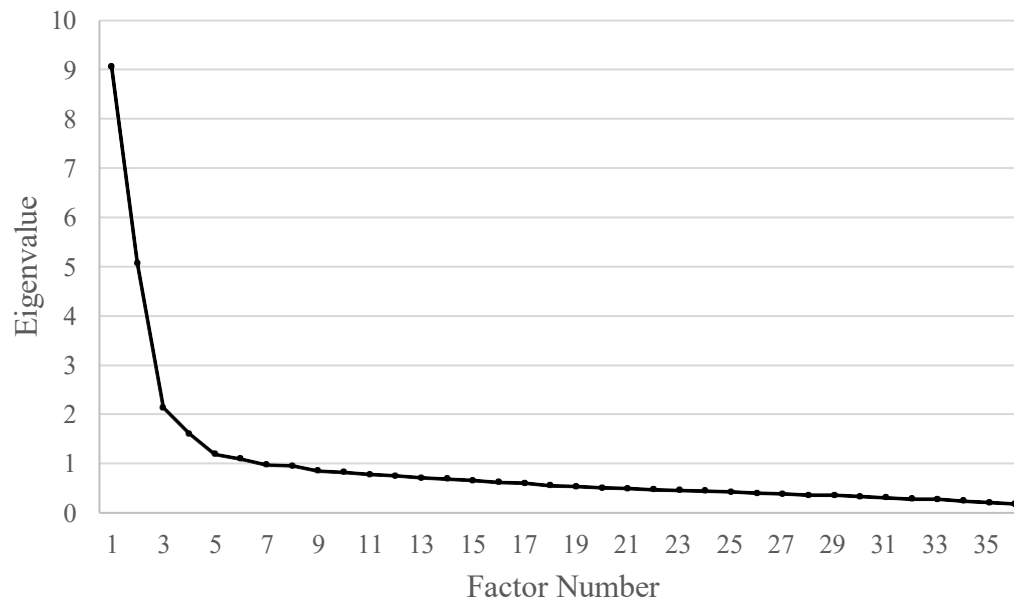
19. Emotional people shouldn't get married
20. Emotional people can't contribute anything to society.
21. People discriminate against individuals who are emotional.
22. Others think that people who are emotional can't achieve much in life.
23. People ignore people who are emotional or take them less seriously just because they are emotional.
24. People often patronize those who are emotional, just because they are emotional.
25. Nobody would be interested in getting close to someone who is emotional.
26. Emotional people don't talk about themselves much because they don't want to burden others with their emotionality.
27. Emotional people don't socialize as much as they used to because being emotional might make them look or behave "weird."
28. Negative stereotypes about emotionality keep emotional people isolated from the "normal" world.
29. Emotional people stay away from social situations in order to protect their family or friends from embarrassment.
30. Being around people who aren't emotional makes emotional people feel out of place or inadequate.
31. Emotional people avoid getting close to people who aren't emotional to avoid rejection.
32. People feel comfortable being seen in public with an obviously emotional person. *
33. In general, emotional people are able to live life the way they want to. *
34. Emotional people can have a good, fulfilling life, despite their emotionality. *
35. Emotional people make important contributions to society. *

36. Living with emotions makes people tough. *

* Reverse-coded items

APPENDIX B

EFA Scree Plot in SONA Sample, All Variables



APPENDIX C

EFA Kaiser-criterion in SONA Sample, All Variables

Factor	Initial Eigenvalue		Extraction SS Loadings		Rotation SS Loadings	
	Total	Variance	Total	Variance	Total	Variance
1	7.891	23.911	7.413	22.463	5.474	16.588
2	4.957	15.023	4.457	13.505	3.394	10.286
3	2.053	6.220	1.528	4.630	2.598	7.873
4	1.590	4.818	1.062	3.217	1.653	5.010
5	1.196	3.624	.651	1.971	1.436	4.353
6	1.081	3.275	.537	1.627	1.090	3.304

Note. SS = Sums of Squared

APPENDIX D

EFA Parallel Analysis in SONA Sample, All Variables

Root	Means	Percentile
1.000000	1.578984	1.658051
2.000000	1.501640	1.552462
3.000000	1.443032	1.493359
4.000000	1.396625	1.433222
5.000000	1.353871	1.391128
6.000000	1.311776	1.341658
7.000000	1.273430	1.299680
8.000000	1.238363	1.268661
9.000000	1.206963	1.236401
10.000000	1.174456	1.205743
11.000000	1.145371	1.174145
12.000000	1.115260	1.139106
13.000000	1.084266	1.107987
14.000000	1.056171	1.084095
15.000000	1.029572	1.053876
16.000000	1.001470	1.023883
17.000000	.976342	.998704
18.000000	.947434	.970915
19.000000	.923137	.944552
20.000000	.897867	.919125
21.000000	.871354	.894410
22.000000	.847341	.871127
23.000000	.824140	.845785
24.000000	.801441	.825024
25.000000	.775508	.796875
26.000000	.748499	.773747
27.000000	.721975	.744997
28.000000	.695198	.715622
29.000000	.669826	.695701
30.000000	.645097	.667310
31.000000	.616391	.647256
32.000000	.584087	.612033
33.000000	.543114	.574083

Note. Specifications for this Run: Ncases = 407; Nvars = 36; Ndatsets = 100; Percent =

EFA Factor Loadings and Fit Criteria in SONA Sam12le, 3 Factor Solution compared to 6 Factor Solution

Item	3 Factor Solution			6 Factor Solution					
	1	2	3	1	2	3	4	5	6
12. People who are emotional should be disappointed in themselves for being emotional.	.805	.236	.179	.836	.105	.147	.161	.009	-.003
18. Emotional people cannot live a good, rewarding life.	.785	.227	.127	.801	.106	.109	.156	-.006	.042
8. People should feel out of place in the world if they are emotional.	.765	.184	.152	.783	.055	.114	.151	.019	.033
20. Emotional people can't contribute anything to society.	.763	.268	.183	.782	.136	.167	.185	.010	.031
9. Emotions spoil peoples' lives.	.719	.215	.091	.715	.160	.072	.061	.068	.196
14. Stereotypes about emotionality are valid.	.628	.179	-.013	.621	.145	.039	.034	-.084	.115
25. Nobody would be interested in getting close to someone who is emotional.	.597	.341	.218	.656	.223	.132	.174	.110	-.048
6. Emotions are a source of weakness.	.502	.111	.134	.432	.098	.261	.037	-.017	.396
2. Emotions make people less productive.	.458	-.008	-.038	.360	-.004	.111	-.030	-.074	.592
17. When people are emotional, they need others to make most decisions for them.	.455	.259	.048	.477	.209	.001	.083	.078	.086
21. People discriminate against individuals who are emotional.	.011	.640	-.196	.065	.679	-.165	.111	-.033	.026

APPENDIX E

23. People ignore people who are emotional or take them less seriously just because they are emotional.	.090	.614	-.120	.141	.667	-.075	.076	-.023	.037
27. Emotional people don't socialize as much as they used to because being emotional might make them look or behave "weird."	.202	.601	.016	.212	.344	-.012	.627	.014	.018
24. People often patronize those who are emotional, just because they are emotional.	.007	.587	-.219	.042	.659	-.097	.066	-.162	.019
13. People who are emotional feel inferior to others who are not emotional.	.279	.573	.047	.302	.442	.049	.335	.027	.087
11. People feel embarrassed or ashamed when they are emotional.	.034	.563	-.135	.010	.564	-.016	.215	-.072	.225
30. Being around people who aren't emotional makes emotional people feel out of place or inadequate.	.201	.545	-.114	.228	.483	-.079	.226	-.051	.073
26. Emotional people don't talk about themselves much because they don't want to burden others with their emotionality.	.106	.543	-.100	.115	.350	-.043	.501	-.145	-.027
22. Others think that people who are emotional can't achieve much in life.	.306	.530	-.029	.368	.453	-.064	.205	.015	-.036
29. Emotional people stay away from social situations <u>in order to</u> protect their family or friends from embarrassment.	.334	.524	.009	.336	.263	-.011	.585	-.009	.066

28. Negative stereotypes about emotionality keep emotional people isolated from the "normal" world.	.137	.492	-.102	.184	.345	-.134	.348	-.038	-.069
31. Emotional people avoid getting close to people who aren't emotional to avoid rejection.	.188	.478	-.018	.246	.384	-.056	.231	.013	-.063
<u>10. People who are not emotional could not possibly understand someone who is emotional.</u>	.336	.391	-.188	.357	.415	-.106	.029	-.142	.080
35. Emotional people make important contributions to society.*	.237	-.025	.688	.335	-.084	.387	-.033	.568	-.191
1. Emotions let people think in interesting and insightful ways.*	.139	-.100	.665	.129	-.116	.685	-.020	.193	-.030
3. Emotions allow people to be imaginative and/or creative.*	.139	-.083	.659	.136	-.146	.645	.058	.203	-.064
7. Emotions makes people unique*	.120	-.089	.634	.091	-.058	.749	-.066	.119	.000
5. Emotions have made my life more meaningful.*	.148	-.114	.595	.115	-.099	.669	-.057	.147	.050
34. Emotional people can have a good, fulfilling life, despite their emotionality. *	.235	-.138	.567	.303	-.243	.282	.025	.489	-.139
33. In general, emotional people are able to live life the way they want to. *	.055	.007	.516	.113	-.095	.259	.105	.472	-.104
36. Living with emotions makes people tough. *	-.081	-.208	.464	-.069	-.150	.309	-.180	.411	.039
<u>32. People feel comfortable being seen in public with an obviously emotional person. *</u>	-.275	-.028	.325	-.252	.034	.113	-.096	.498	.036
4. Emotions have some negative consequences.	.133	.086	-.281	.024	.123	-.176	.017	-.066	.594

Note. Items are listed in the order they indicated from the 3-factor solution. Bolded values represent those loading onto each factor. Underlined values indicate loadings below .3 or cross-loadings with a difference between loadings of $<.1$. Underlined items indicate items considered for exclusion based on low loadings, cross-loadings, or theoretical irrelevance; these items were excluded in the final model. * = reverse coded item.

EFA Factor Loadings and Fit Criteria in SONA Sample, 3 Factor Solution compared to 4 Factor Solution

Item	3 Factor Solution			4 Factor Solution			
	1	2	3	1	2	3	4
12. People who are emotional should be disappointed in themselves for being emotional.	.805	.236	.179	.828	.207	.155	-.002
18. Emotional people cannot live a good, rewarding life.	.785	.227	.127	.798	.202	.112	.033
8. People should feel out of place in the world if they are emotional.	.765	.184	.152	.784	.156	.130	.011
20. Emotional people can't contribute anything to society.	.763	.268	.183	.776	.243	.169	.031
9. Emotions spoil peoples' lives.	.719	.215	.091	.698	.200	.111	.176
14. Stereotypes about emotionality are valid.	.628	.179	-.013	.610	.167	.002	.151
25. Nobody would be interested in getting close to someone who is emotional.	.597	.341	.218	.632	.315	.189	-.061
6. Emotions are a source of weakness.	.502	.111	.134	.437	.112	.218	.419
2. Emotions make people less productive.	.458	-.008	-.038	.382	-.017	.052	.551
17. When people are emotional, they need others to make most decisions for them.	.455	.259	.048	.455	.247	.051	.066
21. People discriminate against individuals who are emotional.	.011	.640	-.196	.009	.646	-.170	.093
23. People ignore people who are emotional or take them less seriously just because they are emotional.	.090	.614	-.120	.081	.621	-.087	.127

APPENDIX F

27. Emotional people don't socialize as much as they used to because being emotional might make them look or behave "weird."	.202	.601	.016	.246	.587	-.008	-.095
24. People often patronize those who are emotional, just because they are emotional.	.007	.587	-.219	-.011	.601	-.179	.151
13. People who are emotional feel inferior to others who are not emotional.	.279	.573	.047	.288	.564	.058	.064
11. People feel embarrassed or ashamed when they are emotional.	.034	.563	-.135	-.016	.594	-.066	.264
30. Being around people who aren't emotional makes emotional people feel out of place or inadequate.	.201	.545	-.114	.202	.543	-.096	.091
26. Emotional people don't talk about themselves much because they don't want to burden others with their emotionality.	.106	.543	-.100	.140	.534	-.116	-.062
22. Others think that people who are emotional can't achieve much in life.	.306	.530	-.029	.333	.517	-.042	-.025
29. Emotional people stay away from social situations in order to protect their family or friends from embarrassment.	.334	.524	.009	.370	.507	-.013	-.057
28. Negative stereotypes about emotionality keep emotional people isolated from the "normal" world.	.137	.492	-.102	.182	.480	-.133	-.115
31. Emotional people avoid getting close to people who aren't emotional to avoid rejection.	.188	.478	-.018	.223	.465	-.038	-.072
<u>10. People who are not emotional could not possibly understand someone who is emotional.</u>	.336	.391	-.188	.319	.389	-.161	.161
35. Emotional people make important contributions to society.*	.237	-.025	.688	.293	-.051	.635	-.255

1. Emotions let people think in interesting and insightful ways. *	.139	-.100	.665	.122	-.101	.690	.041
3. Emotions allow people to be imaginative and/or creative. *	.139	-.083	.659	.138	-.089	.663	-.026
7. Emotions makes people unique *	.120	-.089	.634	.081	-.081	.690	.120
5. Emotions have made my life more meaningful. *	.148	-.114	.595	.107	-.108	.652	.142
34. Emotional people can have a good, fulfilling life, despite their emotionality. *	.235	-.138	.567	.292	-.167	.510	-.262
33. In general, emotional people are able to live life the way they want to. *	.055	.007	.516	.104	-.012	.470	-.228
36. Living with emotions makes people tough. *	-.081	-.208	.464	-.091	-.207	.474	-.005
32. <u>People feel comfortable being seen in public with an obviously emotional person.</u> *	<u>-.275</u>	<u>-.028</u>	<u>.325</u>	<u>-.267</u>	<u>-.024</u>	<u>.323</u>	<u>-.066</u>
4. <u>Emotions have some negative consequences.</u>	.133	.086	<u>-.281</u>	.051	.102	-.201	.463

Note. Items are listed in the order they indicated from the 3-factor solution. Bolded values represent those loading onto each factor. Underlined values indicate loadings below .3 or cross-loadings with a difference between loadings of <.1.

Underlined items indicate items considered for exclusion based on low loadings, cross-loadings, or theoretical irrelevance; these items were excluded in the final model. * = reverse coded item.

APPENDIX G

Complete Emotionality Stigma Scale

Please indicate to what extent you agree or disagree with the following statements (1 = strongly disagree; 4 = strongly agree).

1. Emotions let people think in interesting and insightful ways. *
2. Emotions make people less productive.
3. Emotions allow people to be imaginative and/or creative. *
4. Emotions have made my life more meaningful. *
5. Emotions are a source of weakness.
6. Emotions makes me unique *
7. People should feel out of place in the world if they are emotional.
8. Emotions spoil peoples' lives.
9. People feel embarrassed or ashamed when they are emotional.
10. People who are emotional should be disappointed in themselves for being emotional.
11. People who are emotional feel inferior to others who are not emotional.
12. Stereotypes about emotionality are valid.
13. When people are emotional, they need others to make most decisions for them.
14. Emotional people cannot live a good, rewarding life.
15. Emotional people can't contribute anything to society.
16. People discriminate against individuals who are emotional.
17. Others think that people who are emotional can't achieve much in life

18. People ignore people who are emotional or take them less seriously just because they are emotional.
19. People often patronize those who are emotional, just because they are emotional.
20. Nobody would be interested in getting close to someone who is emotional.
21. Emotional people don't talk about themselves much because they don't want to burden others with their emotionality.
22. Emotional people don't socialize as much as they used to because being emotional might make them look or behave "weird."
23. Negative stereotypes about emotionality keep emotional people isolated from the "normal" world.
24. Emotional people stay away from social situations in order to protect their family or friends from embarrassment.
25. Being around people who aren't emotional makes emotional people feel out of place or inadequate.
26. Emotional people avoid getting close to people who aren't emotional to avoid rejection.
27. In general, emotional people are able to live life the way they want to. *
28. Emotional people can have a good, fulfilling life, despite their emotionality. *
29. Emotional people make important contributions to society. *
30. Living with emotions makes people tough. *

* Reverse-coded items; Sum scores are used to calculate the subscales and total scales. Items 2, 5, 7, 8, 10, 12, 13, 14, 15, 20 make up *Stigma Endorsement*. Items 1,

3, 4, 6, 27, 28, 29, 30 make up *Stigma Resistance*. Items 9, 11, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26 make up *Differential Treatment*.

CURRICULUM VITA

Name: Hayley D. Seely
Business Address: Woodford and Harriett Porter Building
College of Education and Human Development
1905 South 1st Street
Louisville, KY 40292

EDUCATION

2019 – Present **Ph.D.**, University of Louisville
Counseling Psychology
Advisor: Dr. Patrick Pössel
Dissertation: Emotionality Stigma Scale: Measurement, Reliability, and Validity
Doctoral Internship: Denver Health

2017 - 2019 **Master of Science**, Arizona State University
Psychology
Advisor: Dr. Kristin D. Mickelson
Thesis: The Emotionality Effect: The Role of Parental Emotion Expression in Child Mental Health

2013 - 2016 **Bachelor of Science**, Arizona State University
Psychology
Summa Cum Laude
Honors Thesis: Today's Toxicity: An Analysis of Depression Culture and American Society

PROFESSIONAL ORGANIZATIONS

American Psychological Association (APA)
Division 17 Society for Counseling Psychology
Division 53 Society for Clinical Child and Adolescent Psychology (SCCAP)
Division 54 Society for Pediatric Psychology
International Association for Relationships Research (IARR)

RESEARCH APPOINTMENTS

2023 – Present **Co-Investigator, Increasing Access to Adolescent Substance Use Treatment**
Denver Health
PI: Eileen Chen, PsyD

- 2022– Present **Co-Investigator**, Cognition, Emotionality, and Health
University of Louisville
PI: Patrick Pössel, Dr. rer. soc.
- 2020 – Present **Project Coordinator, Tim&Sara**
University of Louisville
PI: Patrick Pössel, Dr. rer. soc.
Projects: TIM & SARA
COVID-19 and Stress
Cognition, Health, and Emotionality Stigma
- 2019 – Present **Research Consultant, MASK E3 Prevention Programs**
Mother’s Awareness on School-aged Kids
PI: Shefali Gandhi, PsyD
- 2017 – 2019 **Lab Manager, Social Relationships and Health Lab**
Arizona State University and Dignity Health
PI: Kristin D. Mickelson, PhD
- 2015 – 2017 **Research Assistant, The MATCH Study**
Arizona State University
PI: Dr. Kristin Mickelson, PhD
- 2014 – 2019 **Program Developer, MASK Academy**
Mother’s Awareness on School-Aged Kids
PI: Shefali Gandhi, PsyD

RESEARCH GRANTS

- 2022 – 2023 **Co-Investigator**, Graduate Student Counsel Research Grant
University of Louisville
Amount: \$500
Emotionality Stigma Scale: Measurement Development, Reliability, and Validity
- 2022 – 2023 **Co-Investigator**, Student-Faculty Collaborative Research Grant
Arizona State University
Amount: \$1,250
Emotionality Stigma Scale: Measurement Development, Reliability, and Validity
- 2018 – 2019 **Principle-Investigator**, Research Grant
Arizona State University’s Office of Knowledge Enterprise Development
The Graduate and Professional Student Association
The Graduate College
Amount: \$720
The Emotionality Effect: The Role of Parental Emotion Expression in Child Mental Health
- 2015 – 2016 **Co-Investigator**, NCUIRE Grant
New College Undergraduate Inquiry and Research Experiences
Amount: \$1000
The Mothers and Their Child’s Health (MATCH) Study

2014 – 2015 **Principle-Investigator**, NCUIRE Grant
New College Undergraduate Inquiry and Research Experiences
Amount: 2 Credit Hours
Is it Cool to be Depressed?: An Analysis of Depression Culture in Society

PUBLICATIONS

Seely, H.D., Pössel, P., & Roane, S. (2023) Reducing the mental health impact of economic difficulty and resource scarcity: Targeting cognitive style as a moderator between economic stress and depressive symptoms. *Current Psychology*. <https://doi.org/10.1007/s12144-023-04897-3>

Seely, H., Gaskins, J., Pössel, P., & Hautzinger, M. (2023). Comprehensive prevention: An evaluation of peripheral outcomes of a school-based prevention program. *Research on Child and Adolescent Psychopathology*, *51*, 921-936. <https://doi.org/10.1007/s10802-023-01043-2>

Litvin, S., Saunders, R., Jefferies, P., **Seely, H.D.**, Pössel, P., & Lüttke, S. (2023). The impact of a gamified mobile mental health app (eQuoo) on resilience and mental health in a student population: Large-scale randomized controlled trial. *JMIR Mental Health*, *10*(e47285). <https://doi.org/10.2196/47285>.

Seely, H.D., Pössel, P. (2023). Parenting behavior and adolescent affect: Bidirectionality and the role of gender. *Journal of Family Issues*. <https://doi.org/10.1177/0192513X211058840>

Mitchell, A., **Seely, H.D.**, Pössel, P. (2022). Intersections of Health, Economic, and Social Concerns During the COVID-19 Pandemic in the United States. *International Perspectives in Psychology: Research, Practice, Consultation*, *11*(3), 178-187. <https://doi.org/10.1027/2157-3891/a000044>

Mickelson, K., Doehrman, P., Chambers, C., **Seely, H.D.**, Kaneris, M. Stancl, R., Stewart, C., Sullivan, S. (2022). Role of discrimination & resilience on birth weight: A systematic examination in a sample of Black, Latina and White women. *Women's Health*, *18*. <https://doi.org/10.1177/1745505722109392>

Valentine, J. C., Cheung, M. W.-L., Smith, E. J., Alexander, O., Hatton, J. M., Hong, R. Y., Huckaby, L. T., Patton, S. C., Pössel, P., & **Seely, H. D.** (2022). A primer on meta-analytic structural equation modeling: The case of depression. *Prevention Science*, *23*, 346–365. <https://doi.org/10.1007/s11121-021-01298-5>

Seely, H.D., & Mickelson, K.D. (2021). Parental emotion dysregulation: The impact on adult-child mental health. *Sex Roles*, *85*(9-10), 515-527. <https://doi.org/10.1007/s11199-021-01237-2>

Seely, H. D., & Mickelson, K.D. (2019) Maternal resilience as a protective factor between financial stress and child outcomes. *Journal of Family Issues*, *40*(12), 1604–1626. <https://doi.org/10.1177/0192513X19842609>

MANUSCRIPTS UNDER REVIEW

Seely, H.D., Mickelson, K.D. Emotionality Stigma: Theoretical Underpinnings of a New Construct. Submitted to the Journal of Psychopathology and Clinical Science.

Seely, H.D., & Mickelson, K.D. Why regulation?: The role of parental emotion regulation in adult-child mental health. Under review with *Social Development*.

Pössel, P., **Seely, H.D.**, Mitchell, A. Different Repetitive Negative Thinking Styles, COVID-Related Stress, and Mental Health. Under review with *Journal of Psychopathology and Clinical Science*.

Seely, H.D., Pössel, P., Mitchell, A., Roane, S., Harbison, B., Prittard, C., Fernandez-Botran, R., Knopf, K., Depression symptoms mediating between cognitive triad and inflammation in oncology nurses. Under review with *Supportive Care in Cancer*.

Pössel, P., **Seely, H.**, & Hautzinger, M. (2023). Universal school-based Depression Prevention: What makes Psychologist more Effective than Teachers?. Under review with *Kindheit und Entwicklung*.

Pössel, P, Marchetti, I., & **Seely, H.D.** Differences and Similarities in the Architecture of Cognitive Vulnerability to Depressive Symptoms Black and White American Adolescents: A Network Analysis Study.

Seely, H.D., & Pössel, P. Equity and inclusion in prevention: Is prevention efficacious in diverse groups? Invited for the special issue "Prevention of Depression" in the *Journal of Consulting and Clinical Psychology*.

Chen, E., & **Seely, H.D.** Adolescent substance treatment engagement: Rolling admission, incentives, and transportation support. Invited for the special issue on 'Improving Impacts of Mental Health Treatment on Substance Misuse and Vice Versa' with *Frontiers in Child and Adolescent Psychiatry*.

MANUSCRIPTS IN PREPARATION

Seely, H.D., & Pössel, P. Equity and inclusion in prevention: Is prevention efficacious in diverse groups? Invited for the special issue "Prevention of Depression" in the *Journal of Consulting and Clinical*.

Seely, H.D., Bresin, K. Social influence in non-suicidal self-injury: A review and introduction to the application of emotionality stigma. To be submitted to *Cogent Mental Health* in Fall 2023.

Seely, H.D., & Pössel, P. The role of consistency in parenting behavior and offspring's gender in adolescent positive and negative affect.

Mickelson, K.D., Chambers, C., Doehrman, P., **Seely, H.D.**, & Stancl, R. Review of risk and protective factors for low birthweight.

Harbison, B., **Seely, H.D.**, Pössel, P., & Roane, S. Does the response style theory explain the relation between subjective social status and depression in college students?

RESEARCH DISSEMINATION EFFORT FOR PUBLIC CONSUMPTION

Contracted writer for MASK, the Magazine. Published articles translate peer-reviewed research findings to the general public. Articles include:

Seely, H.D. (2021). Mental wellness: Depression, anxiety, and generation z. *MASK the Magazine*, 14(2), 54-55.

Seely, H.D. (2020). Actions, accountability, and resilience: Giving kids the skills to deal with bullying. *MASK the Magazine*, 12(2), 54-55.

Seely, H.D. (2019). Your choices impact our choices. *MASK the Magazine*, 8(2), 54-55.

Seely, H.D. (2018). Stress: Education is key. *MASK the Magazine*, 7(2), 54-55.

Seely, H.D. (2017). Boundaries: Setting healthy boundaries with your children. *MASK the Magazine*, 6(2), 54-55.

PROFESSIONAL TALKS

Seely, H., & Mickelson, K.D. (2023, May) Parental emotion regulation and offspring mental health. *International Association for Relationship Research's 2023 Mini-Conference*. Phoenix, AZ.

Pössel, P., & **Seely, H.** (2023, March). School-Based Depression Prevention: Considering Sociocultural Factors. *2023 Annual Engaged Scholarship Symposium*. Louisville, KY.

Pössel, P., **Seely, H.,** Gaskins, J., & Hautzinger, M. (2022, September). Comprehensive prevention: An evaluation of peripheral outcomes of a school-based prevention program. *52th European Association for Behavioural and Cognitive Therapies - EABCT 2022*. Barcelona, Spain.

Seely, H. (2022, August). Emotionality Stigma: Theory and Measurement. Psych Science in 3 presented at the *American Psychological Association 2022 Convention*. Minneapolis, MN.

Seely, H., & Mickelson, K.D. (2021, July). In It Together or Alone: Role of Communal Coping in New Parents' Postpartum Depression. Paper presented at the *International Association for Relationship Research's 2021 Conference*. Virtual Event.

Seely H., & Pössel, P. (2020, February). The role of offspring's gender in the bidirectional associations between parenting behavior and adolescent affect. Paper presented at the Graduate Student Regional Research Conference. Louisville, KY

Mickelson, K.D., Chambers, C., Doerhman, P., **Seely, H.,** & Stancl, R. (2020). Race/ethnicity and perceived discrimination in medical setting among pregnant women. Paper presented at the *Spring 2020 Euro Nursing Conference*. Venice, Italy.

Seely, H., & Mickelson, K.D. (2019, July). The Emotionality Effect: The Role of Parent Emotion Expression in Child Mental Health. Data Blitz presented at the *International Association for Relationship Research's 2019 Mini Conference on Applied Relationship Science*. Brighton, UK.

Seely, H., & Mickelson, K.D. (2019, April). Trauma, depression, and the parent-child relationship. Paper presentation at the *Rocky Mountain Psychological Association's 2019 Convention*. Denver, CO.

Seely, H., & Mickelson, K.D. (2019, April). The Emotionality Effect: The Role of Parent Emotion Expression in Child Mental Health. Paper presented at the *Western Psychological Association's 2019 Convention*. Pasadena, CA.

Anderson, H., & Mickelson, K.D. (2017, October) Mother's Resilience as a Protective Factor between Financial Stress and Child Well-Being. Paper presented for the *Social Psychologists of Arizona Conference*. Tempe, AZ.

POSTER PRESENTATIONS

Seely, H., Pössel, P., & Mickelson, K.D. (2023, May). The Emotionality Stigma Scale: Measurement Development, Reliability, and Validity. *International Association for Relationship Research's 2023 Mini-Conference*. Phoenix, AZ.

- Seely, H.,** & Mickelson, K.D. (2022, August). Why Regulation Matters: The Relationship Between Parental Emotionality and Child Mental Health. Poster presented at the *American Psychological Association 2022 Convention*. Minneapolis, MN.
- Seely, H.,** Pössel, P., & Roane, S. (2022, August). Cognitive Style as a Moderator Between Subjective Social Status and Depressive Symptoms. Poster presented at the *American Psychological Association 2022 Convention*. Minneapolis, MN.
- Seely, H.,** Gaskins, J., Pössel, P., & Hautzinger, M. (2021, April) Comprehensive Prevention: Peripheral Outcomes of a Depression Prevention Program. Poster presented at the *2022 Kentucky Psychological Science Conference*. Louisville, KY.
- Seely, H.,** Gaskins, J., Pössel, P., & Hautzinger, M. (2021, April) Comprehensive Prevention: A Secondary Analysis of Peripheral Outcomes of a School-based Prevention Program. Poster presented at the *2021 Society for Research in Child Development Biennial Meeting*. Virtual Event.
- Seely H.,** & Mickelson, K.D., (2020, February). The impact of parental emotion dysregulation on adult-offspring mental health. Poster presented at the Graduate Student Regional Research Conference. Louisville, KY
- Burton, S., **Seely, H.,** Hatton, J., Pössel, P., Van Voorhees, B., & Gladstone, T. (2020, February). PATH 2 Purpose: A multi-site comparative effectiveness research trial evaluating two adolescent depression-prevention interventions within major health systems. Poster presented at the Graduate Student Regional Research Conference. Louisville, KY
- Spokes, J., Strom, T., Solanki, P., **Seely, H.,** Thibault, S., Silva, Y., & Hall, D. (2019, October). ActionPoint: Action-driven app to strengthen parent-teen relationships to understand and identify cyberbullying. Poster presented at the *2019 NSF Principal Investigator's Meeting for the Secure and Trustworthy Cyberspace (SaTC) Program*. Alexandria, VA.
- Mickelson, K.D., Chambers, C., Doerhman, P., **Seely, H.,** Stancl, R. (2019, August). Discrimination, Resilience, & Biomedical Pathways in Low Birth Weight Prevalence. Poster presented at the *1st Annual CommonSpirit Health Research Conference*. Sacramento, CA.
- Anderson, H.,** & Mickelson, K.D. (2018, July). Maternal Resilience as a Protective Factor between Financial Stress and Child Well-Being. Poster presented at the *International Association for Relationship Research Conference*. Fort Collins, CO.
- Anderson, H.,** & Mickelson, K.D. (2018, April) Is it Cool to be Depressed?: An Analysis of Depression Culture within American Society. Poster presented at the *Western Psychological Association Convention*. Portland, OR.
- Anderson, H.,** & Mickelson, K.D. (2018, April) Is it Cool to be Depressed?: An Analysis of Depression Culture within American Society. Poster presented at the *Anxiety and Depression Association of America Conference*. Washington, D.C.
- Anderson, H.,** & Mickelson, K.D. (2016, October). Today's Toxicity: An Analysis of Depression Culture and American Society. Poster presented at the *Arizona State University Barrett Honor's Symposium*. Tempe, AZ.

TEACHING EXPERIENCE

- 2022 – Present **Adjunct Faculty**, Spalding University
Courses: Child and Adolescent Development
Child Psychopathology
Adult Development
- 2022 – Present **Instructor of Record**, Mental Health and the Helping Professions
University of Louisville
- Fall 2022 **Guest Lecturer**, Theories of Counseling and Psychotherapy
University of Louisville
Topic: Dialectical Behavior Therapy
- Fall 2021 –
Spring 2023 **Instructor of Record**, Human Development and Learning
University of Louisville
- Spring 2018 **Graduate Teaching Assistant**, Graduate Quantitative Analysis II - Regression
Arizona State University
Instructor: Dr. Deborah Hall
- Fall 2018 **Graduate Teaching Assistant**, Graduate Quantitative Analysis I - ANOVA
Arizona State University
Instructor: Dr. Nick Schweitzer
- Fall 2016 **Undergraduate Teaching Assistant**, Effective Thinking (Psychology)
Arizona State University
Instructor: Dr. Steven Lewis

CLINICAL TRAINING

- 2023 **CBT for Addictive Disorders**, Dr. Bruce Liese, Ph.D.
- 2023 **Alternatives for Families - CBT**, The National Child Traumatic Stress Network
- 2022 **Integrated Care**, National Register Associate Certificate Program
- 2020 **Autism Diagnostic Observation Schedule (ADOS 2) Administrative Training**,
Kentucky Autism Training Center
Instructor: Dr. Rachel Hundley, Ph.D.
- 2020 **Clinical Suicidality**, National Register Associate Certificate Program
- 2020 **Telepsychology Best Practices**, American Psychological Association
- 2020 **Trauma-Focused CBT**, TF-CBTWeb2.0

CLINICAL AND PROFESSIONAL EXPERIENCE

- 2023 – Present **Psychology Resident**, Denver Health
Supervisors: Laura Jacobs, PsyD, Eileen Chen, PsyD, Thom Dunn, PhD
Rotations: Pediatric Consultation/Liaison Psychology, Adolescent Substance Use
Intensive Outpatient Treatment Program, Family-Oriented Resilience, Growth, and
Empowerment Outpatient Program

- 2022– 2023 **Student Clinician**, Norton Children’s Development Center
Supervisors: Kimberly Schauder, PhD, Margaret Calvery, PhD
- 2022 **Student Clinician**, Have a Heart Outreach Event
Supervisor: Patrick Pössel, Dr. rer. soc.
- 2021 – 2022 **Student Clinician**, Norton Children’s Hospital and Bingham Clinic
Supervisors: Kayla LaRosa, PhD; Courtney Smith, PhD
- 2020 – 2021 **Student Clinician**, Norton Children’s Autism Center
Supervisor: Grace Kuravackel, PhD
- 2020 – 2021 **Student Clinician**, The Cardinal Success Program NIA Center
Supervisor: Brooke Rappaport, PhD
Rotations: Department of Juvenile Justice, Community Mental Health
- 2014 – 2019 **Prevention Program Facilitator**, Mother’s Awareness on School-Aged Kids
Supervisor: Shefali Gandhi, PsyD
- 2016 – 2017 **Behavior Coach**, Devereux Advanced Behavioral Health

PROFESSIONAL SERVICE

- 2023 **Interdisciplinary Teaching**, Proactive Pediatric Psychology Consultation/Liaison
Denver Health Pediatric Intensive Care Unit
- 2020 – Present **Resource Developer**, The Student Psychologist
- 2020 – Present **Ad Hoc Reviewer**
Journals: *Translational Issues in Psychological Science*
Motivation Science
Current Psychology
- 2022 – 2023 **Division 53 Mentor**, Society for Clinical Child and Adolescent Psychology (SCCAP)
- 2020 – 2023 **Committee Member**, Kentucky Psychological Association Graduate Students
- 2020 – 2023 **Peer Mentor**, Counseling Psychology, University of Louisville
- 2019 – 2021 **Peer Reviewer in collaboration with Mentor**,
Journals: *The Counseling Psychologist*
Mental Health and Prevention
Journal of Youth and Adolescence
- 2021 **Policy Advocate**, Kentucky Psychological Association (KPA)
- 2020 – 2021 **Co-Founder**, Kentucky Psychological Association (KPA) Mentorship Program
- 2019 –2021 **Doctoral Student Representative**, Counseling Psychology
University of Louisville
- 2019 – 2020 **Community Advocate**, Louisville Metro Trauma Resilient Community (TRC) Initiative

- 2019 – 2020 **Consultant**, Louisville Strong Youth Promotion Partnership
- 2018 – 2019 **Ambassador**, Students Providing Awareness, Resources, and Knowledge to Start College
- 2018 – 2019 **Research Grant Reviewer**, Graduate and Professional Student Association (GPSA)
- 2017 – 2019 **Travel Grant Reviewer**, Graduate and Professional Student Association (GPSA)
- 2017 – 2019 **Student Mentor**, School of Social and Behavioral Sciences
- 2017 **Capstone Committee Member**, Arizona State University's Teacher's College

SELECT FELLOWSHIPS, AWARDS, AND OTHER GRANTS

- 2023 **Professional Development Award**, Society of Clinical Child and Adolescent Psychology
- 2021 **Leadership Academy**, Kentucky Psychological Association (KPA)
- 2019 – 2021 **University Fellowship**, University of Louisville
- 2019 **E3 Award**, Mother's Awareness on School-Aged Kids
- 2019 **Outstanding Graduate Student Award**, Arizona State University
- 2018 **Graduate College Fellowship**, Arizona State University
- 2013- 2016 **Provost Award**, Arizona State University
- 2016 **Moeur Award**, Arizona State University