5-2021

Awe in the Helping Professions: Approaching Well-Being for Graduate Trainees Through Transcendent Emotion

Anna Forcelle

Awe in the Helping Professions:

Approaching Well-Being for Graduate Trainees Through Transcendent Emotion

by

Anna Forcelle

Presented to the Faculty of the

Graduate School of Clinical Psychology

George Fox University

in partial fulfillment

of the requirements for the degree of

Doctor of Psychology

in Clinical Psychology

Newberg, Oregon

May 28, 2021

Awe in the Helping Professions:

Approaching Well-Being for Graduate Trainees Through Transcendent Emotion

by

Anna Forcelle

has been approved

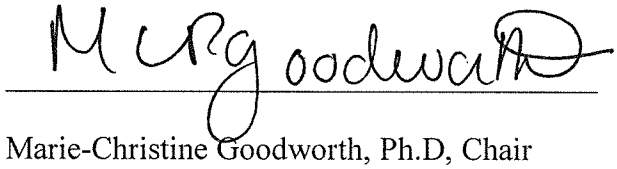
at the

Graduate School of Clinical Psychology

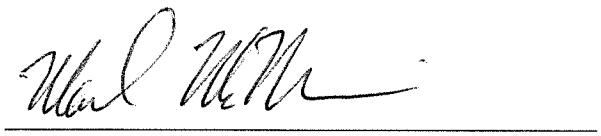
George Fox University

as a Dissertation for the PsyD degree

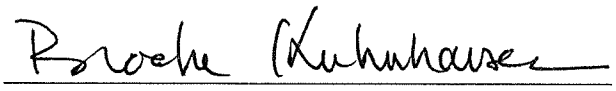
Signatures:



Marie-Christine Goodworth, Ph.D, Chair



Mark McMinn, PhD, Member



Brooke Kuhnhausen, PhD, Member

Date: 5/28/2021

Awe in the Helping Professions:
Approaching Well-Being for Graduate Trainees Through Transcendent Emotion

Anna Forcelle

Graduate School of Clinical Psychology

George Fox University

Newberg, Oregon

Abstract

Graduate school is a unique season of life involving high demands and high pressure, leaving adult degree-seeking students vulnerable to stress and negative health outcomes. Students seeking degrees in helping professional programs face additional risks due to the unique amounts of compassion required to engage in others-oriented work, leaving them susceptible to compassion fatigue and burnout. With a recent resurgence in the literature on the self-transcendent emotion of awe, which is associated with greater well-being, this present study sought to examine if experiences of awe can help sustain well-being and reduce the risk of compassion fatigue in helping profession graduate trainees. Based on resent research on the potency of nature to induce feelings of awe, this design randomly assigned graduate students in PsyD and DPT graduate programs at George Fox University to a clinical group who viewed an immersive nature video and a control group who viewed a video containing neutral stimuli. Pre-measures of dispositional awe and both state and trait compassion were obtained, and a post-intervention measure of awe experience and professional quality of life were obtained. Results

show that baseline levels of dispositional awe and both state and trait compassion were significantly correlated. A MANOVA revealed a significant difference between the control group and the intervention group, however, only awe experience was found to be significant and there were no observed differences in compassion satisfaction or compassion fatigue. Follow-up analyses examined specific facets of the awe experience elicited by the awe intervention video designed specifically for the present study. Implications include that awe and compassion appear to be correlated and it is possible to induce meaningful feelings of awe in a relatively short period of time.

Keywords: helping professions, graduate students, awe, compassion, transcendent emotion

Table of Contents

List of Tables

Chapter 1

Introduction

According to the National Alliance on Mental Illness (2019) it is estimated 1 in 5 adults experience mental illness each year, and 43.3% of U.S. adults with mental illness received treatment in the year 2018 alone. Therapists and other helping professionals are enlisted with the task of providing safe spaces for individuals struggling with their mental or physical health to receive necessary care. A career in the helping professions, including social work, counseling, psychology, physical therapy, nursing, teaching, and pastoral care, offer a compelling potential for professionals to receive compassion satisfaction through relationally engaging work (Hunter, 2012). Further, a career in a helping profession has the potential to nurture the innate curiosity and wonder of simply being with another, drawing individuals who find interpersonal interactions rewarding to these fields (Griffith & Griffith, 2002). Healthy, psychologically present, and committed professionals are in the best position to offer care and assistance to others (Killian, 2008). Given the high levels of risk for stress, vicarious traumatization, and burnout within helping profession fields, it is important to explore ways to foster well-being beginning early in graduate training (Tierney et al., 2018).

Stress in Helping Profession Graduates

Graduate degree seeking students across professions routinely encounter high levels of stress, which can lead to negative physical and mental health outcomes (Van Berkel & Reeves, 2017). The unique demands of graduate school include rigorous academic coursework, research,

clinical training, and financial constraints layered within competitively-oriented program atmospheres (Myers et al., 2012). Individuals pursuing careers within helping professions face additional stressors and potential fatigue due to the compassion and empathy required for the other's-oriented work they are engaging in (Newsome et al., 2012). Pearlman and Mac Ian (1995) discovered a mental health practitioner's first experiences working with clients who present with trauma occurs in graduate school clinical training, and novice therapists are more likely to experience difficulties metabolizing these encounters. Launching into a helping profession career thus requires a unique combination of effectively coping with graduate school stress, while simultaneously navigating encounters of human pain and suffering.

Compassion Fatigue

Relational processes are considered the foundation of helping professions in order to offer clients, patients, or students a safe framework to develop, grow, and heal. Relational characteristics needed by a professional include the following: "the ability to intensively engage with others, keen interpersonal perception, [an ability to be] led by the well-being of the client, [and] express compassion within limits" (Skovholt, 2005). Helping others through this relationship-oriented lens has the potential to be profoundly emotionally rewarding, but also creates one-of-a-kind risks for professional burnout and fatigue (Andreychik, 2019). Figley (2002) identifies the act of exuding compassion and caring comes at a cost: "in our effort to view the world from the perspective of suffering we suffer" (p. 1434). Loosely defined, compassion fatigue is the reduced capacity or interest in shouldering the suffering of others. Formally, compassion fatigue refers to "a state of tension and preoccupation in which an individual experiences symptoms similar to posttraumatic stress disorder (PTSD) following exposure to traumatizing material presented by a patient" (O'Brien & Haaga, 2015). Compassion fatigue is

therefore a unique risk to professionals who routinely interact relationally with individuals who have experienced trauma. Young professionals may not yet have the skills to navigate heavy emotional encounters in clinical work, and may be particularly susceptible to compassion fatigue and subsequent burnout (O'Brien & Haaga, 2015).

Self-Transcendent Emotions

Professionals in helping fields must to able to move beyond themselves in order to effectively provide care to others. The idea of self-transcendence as a psychological construct of character refers to the ability to simultaneously hold an awareness of dimensions greater than the self without de-valuing the self (Otway & Carnelley, 2013). Self-transcendence can be viewed as an "other-oriented" concept in the way it shifts attention off of the self for a time in order to focus on another person, a cause, or any outside force (such as truth, the divine, or nature). The ability to transcend the self in a healthy and meaningful way requires attunement to these kinds of 'other' that exist in the world. Transcendent emotions include, "compassion, awe, gratitude, appreciation, inspiration, admiration, elevation, and love" (Stellar et al., 2017). The field of positive psychology has remained attentive to these emotions as the focal point for research, finding ways for individuals to better understand and practically explore their positive emotions.

Understanding Compassion

Compassion is commonly defined as a feeling that arises in witnessing another's suffering, instilling a subsequent desire to help (Goetz et al., 2010). The word compassion is derived from two Latin terms: *com* (with) and *pati* (to suffer), revealing a literal meaning of "to suffer with," or alongside of (Lomas, 2015). Lomas (2015) proposes compassion holds a unique ability to shift an individual's sense of identity from an individualized locus to a more "intersubjective mode of being" (p. 169). An experience of compassion helps an individual move beyond themselves in

order to encounter and hold suffering alongside of another. A compassion experience has the potential to elicit both profound warmth and tenderness towards another, as well as feelings of sadness, and is often the motivator behind pro-social behaviors (Stellar et al., 2011). On a deeper level, Lomas (2015) theorizes the unique self-transcendence involved in the emotional experience of compassion can not only alleviate the suffering of the recipient, but alleviate suffering of the individual exuding compassion, as it holds the potential to accelerate psychospiritual development when faced with existential questions of suffering as a whole.

Understanding Awe

Awe is described as the feeling of being in the presence of something so vast it transcends an individual's understanding of the world (Keltner, 2016). Keltner and Haidt (2003) identify two central requirements within this visceral, emotional experience of awe: the stimulus must be vast and the stimulus must require accommodation. The inclusion of the term *vast* as a core tenet of awe accounts for a wide range of aesthetic experiences and can be defined as anything larger than the self. A divine spiritual encounter or witnessing a thunderstorm are both examples of an encounter larger than the self. *Accommodation* refers to the psychological process of adjusting mental structures that cannot assimilate to a new experience, which must occur when encountering an awe-provoking situation larger than the self. An experience of profound awe will often disrupt a normal, everyday understanding of the world, mandating such accommodation (Allen, 2018). If both features, vastness and accommodation, are not present, Keltner and Haidt (2003) relate the experience may better be named and explained by a different emotion, such as surprise or admiration.

Awe is capable of eliciting wonder, amazement, and pleasure, yet in the face of something awe-inspiring, a common response is also to feel small, humbled, and left trembling

(Silvia et al., 2015). There is a feeling of being put in touch with something deep or numinous, which compounds the experience of pleasure (Schneider, 2011). It is for this reason, awe can be a mysterious and strange phenomenon captivating to psychologists seeking to understand the depth of human experience:

> Awe is, in one special sense, the excitement of participation. Translated into process, awe befriends depth psychotherapy—not by promising to remove all pain, rather by addressing (with reverence) the pained person; not by eradicating his conflict. (Schneider, 2009, p. 117)

This illustrates the capability of awe to lead to a state of self-acceptance by acknowledging the human experience, even the hard aspects of this experience, with reverence. It shows it is possible to be in awe of facets of life that are painful. This idea serves as a preview for the capacity awe has as a means for self-connection.

Awe and Nature

Psychologists have long been interested in the mental and physical benefits elicited by nature. Clay (2001) published an overview of groundbreaking research in an APA cover story highlighting the health potential of simple immersion in the natural world around us. Researcher Rachel Kaplan (as cited in Clay, 2001) found American office workers who had a view of nature liked their jobs more, maintained better overall health, and reported higher life satisfaction. Further, Ulrich (as cited in Clay, 2001) found the views from windows in hospitals had a significant effect on patients recovering from abdominal surgery. Research illustrates nature is one of the most positive elicitors of the experience of awe, and connection to nature is historically tied to reduced stress and overall positive well-being (Anderson et al., 2018). Anderson et al. (2018) conducted a quantitative study where they found awe experienced by

immersion into nature on a white-water rafting trip predicted changes in well-being and stress-related symptoms in military veterans and youth from underserved communities. Yaden, et al. (2016) further discovered astronauts who have observed earth's natural beauty from space returned to earth with a new perspective and renewed purpose thanks to this awe-invoking experience.

While many stimuli can elicit feelings of awe, encounters with nature are considered the prototypical awe experience in Western cultures (Piff et al., 2015). Encounters involving complex phenomenon where the eliciting stimulus is immense in size, scope, or complexity, such as the night sky or the ocean are often used in the experimental designs of awe research (Shiota et al., 2003). The vastness of captivating and immersive nature experiences, regardless of whether these experiences happen in-vivo or while interacting with videos or pictures, lead to reduced engagement in self-referential processing necessary for an awe experience (Van Elk et al., 2019). In their study utilizing functional magnetic resonance imaging (fMRI) to measure brain activity during the experience of awe, Van Elk et al. (2019), found participants had strong experiences of awe when they watched awe inspiring videos with an absorptive compared to an analytical mindset. "Absorption in awe may be accompanied by a reduction in mind-wandering and spontaneous self-reflective thought that is comparable to active engagement in attentional or analytical tasks," as evidenced by reduced activation in the Default Mode Network (DMN), a brain region shown to be a major player in self-referential processing (Van Elk et al., 2019, p. 3573). Carefully selected immersive nature videos are sufficient in creating simulative awe experiences based on these findings.

Awe and Physiology

Current research and advances in technology have made it possible to study physiological responses during dynamic emotional situations, including the complex experience of awe (Golland et al., 2014). Electrodermal and cardiovascular measures are two current tools used to measure ongoing changes in autonomic activity, and each house the potential to shed light on temporal aspects of physiological responses by capturing moment-to-moment bodily experiences (Golland et al., 2014). Negative emotions, such as shame, have been linked to aversive health outcomes, such as an increase of proinflammatory cytokine production (Dickerson et al., 2004). The presence of these cytokines in the body have strong effects on the functioning of the central nervous system, including the heightening and perpetuation of negative moods (Kiecolt-Glaser et al., 2002).

Positive emotions are associated with more positive health outcomes. Stellar et al. (2015) asserts, "positive emotions not only feel good, they are good for the body" (p. 132). In Stellar et al.'s (2015) study on proinflammatory cytokines, it was discovered dispositional awe held the strongest relationship with reduced levels of these cytokines when compared against other positive dispositional emotions such as joy or pride. It was hypothesized here that awe facilitates curiosity and exploration, which combats against the adaptive purpose of proinflammatory cytokines to withdraw and limit exploration in order for the body to have space to heal itself when sick. Living life in awe and seeking out awe experience therefore can be a protective factor from health risks.

Measuring experiences of awe in the body has been profoundly effective through electrodermal activity, also termed galvanic skin response or skin conductance (Shiota et al., 2011). "[Skin conductance] depends on the activity of the sweat gland which is controlled by the

sympathetic nervous system," and serves as an index of psychophysiological arousal (Chirico et al., 2017, p. 7). Using this measure, it is possible to differentiate awe from other emotions (Stellar et al., 2015). Chirico et al., (2017) discovered awe-inducing content, such as an immersive nature video, elicited a stronger parasympathetic activation compared to other immersive content as measured by skin conductance responses (SCRs).

Purpose of the Study

This research study seeks to examine if experiences of awe can help sustain well-being and reduce the risk of compassion fatigue in helping profession graduate trainees. Examining an individual's in-the-moment experience of the transcendent emotion of awe has the potential to reveal useful support methods for helping young professionals in high stress graduate programs sustain overall positive well-being. Understanding what fuels compassion can help individuals engage in more efficacious self-care as they routinely encounter pain and suffering. Lomas (2015) identifies a gap in current literature of exploring how to explicitly encourage and facilitate self-transcendence in the context of compassion training. Additionally, the consequences of compassion fatigue can be detrimental to an individual's physical and mental health, leading to professional burnout and inadequate client, patient, or student care. Rockwell (2019) proposes individuals who learn to reflect awe, embrace mystery, and immerse themselves in the here-and-now will be more in love with life, and it is possible if clinicians can learn to embrace their own health and well-being, clients will learn to do the same. In order to sustain passion in graduate school to go beyond the self and provide care and compassion to others, unique awareness of factors contributing to this level of well-being is important.

Hypothesis 1

In both intervention and control groups, individuals who have more dispositional awe will also have high levels of trait and state compassion.

Hypothesis 2

In the intervention group, awe and compassion will increase, and compassion fatigue (i.e., levels of burnout and secondary traumatic stress) will be lower compared to the control group.

Chapter 2

Methods

Participants

This study consisted of a random sample of 100 degree-seeking adults (18+) currently enrolled in helping profession graduate programs at George Fox University, a private university located in the Pacific Northwest region of the United States. The following two graduate level programs were included in this pool: Graduate Program of Clinical Psychology (PsyD) and Graduate Program of Physical Therapy (DPT). See Appendix A for demographic survey. Participants included 30 male-identifying individuals (30%) and 70 female-identifying individuals (70%) with ages ranging from 21 to 52 years ($M = 27.22$, $SD = 5.44$, $N = 99$). The sample included the following breakdown of ethnicity: 78% White, 7% Hispanic, Latino, or Spanish Origin, 5% Asian, 5% Other (Asian and White, Multiethnic, and White-Irish), 3% Black or African American, 1% Middle Eastern or North African, and 1% Native Hawaiian or Other Pacific Islander. Fifty-nine participants endorsed being currently enrolled in the PsyD program at George Fox University and 41 participants endorsed being currently enrolled in the DPT program at George Fox University. 26% of participants were in the first year of their respective program, 26% were in their second year, 27% were in their third year, and 21% were in their fourth year.

Procedures

This study was re-approved by the Institutional Review Board (IRB) at George Fox University on March 16, 2021 following modifications made to the original design due to a need

to move data collection from in-person to online during the COVID-19 pandemic. Consent was obtained from each department chair of the helping professional programs prior to data collection and emails of students were obtained (with permission) through program administrators. Participation from students was completely voluntary and informed consent was acquired from each student prior to participating in this study (see Appendix B).

Students in the PsyD and DPT programs were given the opportunity to participate in this study via email, and SurveyMonkey was the online platform chosen for data collection. Random selection was used to assign participants to either an experimental group or a control group. Once email lists were obtained from each respective program administrators, the lists were put in an online randomizer program (www.randomlists.com) to determine who received one of two separate SurveyMonkey forms, one of which contained an intervention video and one of which contained a control video, but were otherwise identical. From the PsyD program, 55 participants were randomly assigned to the intervention group and 54 participants were randomly assigned to the control group. From the DPT program, 67 participants were randomly assigned to the intervention group and 67 participants were randomly assigned to a control group. All students were informed that their peers may have received a different SurveyMonkey link and to only complete the survey sent directly to their email inbox.

There were 100 people who opened the survey link. Of those, 93 completed the full survey. Two participants discontinued the survey during the demographics portion. Five participants completed the pre-intervention measures but discontinued after the video intervention and did not complete the post intervention. Demographic data was analyzed using the full 100 participants and the analyses of pre-intervention measures included the 98

participants who completed the pre-intervention measures. The post intervention analyses included the 93 participants who completed the entire study.

Pre-Intervention

In the pre-intervention phase of the study, baseline measures of dispositional awe and compassion were assessed using the awe subscale of the Dispositional Positive Emotion Scale (DPES) and a modified version of The LovingKindness-Compassion Scale (LCS).

Intervention

Intervention Group. Based on research showing immersive nature videos are sufficient in simulating awe experiences (Van Elk et al., 2019), video clips of drone footage taken at Silver Falls, Oregon were selected for this project. This footage, captured by George Fox University PsyD student Britton Holman, was cut and assembled specifically for use in this project. The video, containing views of waterfalls and sunlight reflecting through trees, can be found here: https://www.youtube .com/watch?v=voJey_Cx-D4. This video clip was embedded into the SurveyMonkey form, lasted 1 minute and 33 seconds in length, and had no accompanying sound. Participants were asked to make the video full screen on their device if possible and instructed it would be best to view in a quiet, focused space. In order to move forward in the survey, participants were required to check a box indicating, "I have watched this video in its entirety."

Control Group. The control group watched a same length video containing neutral stimuli, which was included to control for the effect of the selected awe-inducing content. A YouTube video containing clips of tractors driving across fields was selected for this purpose, chosen based on similar studies where clips of neutral landscapes were used in contrast to awe intervention videos (Van Elk et al., 2019). Fair use of this video published on YouTube was carefully evaluated, and permission was requested from the copyright holder (see Appendix C).

This video, published by user FLT, was cut to match the length of the intervention video with no accompanying sound and can be found here: https://www.youtube.com/watch?v=xyPWfo2ZNAs. The original, uncut version, published by user FLT, can be found here: https://www.youtube.com/watch?v=LCqcKAHs0EU&t=0s. Participants in the control group were given the same instructions as the intervention group, including the requirement of checking a box indicating, "I have watched this video in its entirety" in order to move forward in the survey.

Post Intervention

Following the awe intervention and/or control intervention, the Awe Experience Scale (AWE-S) was administered to obtain a measure of each participant's in-the-moment experience of awe. Last, professional quality of life was assessed using the Professional Quality of Life Scale (ProQOL), bringing participants to the end of the survey.

Materials

Dispositional Awe

Dispositional awe was measured using the awe subsection of the Dispositional Positive Emotion Scale (DPES) developed by Shiota et al. (2006). See Appendix D. The DPES consists of seven total subscales: joy, contentment, pride, love, compassion, amusement, and awe. The awe subscale consists of six questions and is measured on a 7-point Likert scale, including items such as, "I see beauty all around me." The awe subscale has a Cronbach's alpha of 0.78. Items are averaged, yielding a score ranging between 1 and 7, with a higher score indicating higher levels of the positive emotion. In this sample, the Cronbach's alpha for the DPES awe subscale was .80.

Compassion

Levels of both state and trait compassion was measured using select questions from The LovingKindness-Compassion Scale (LCS), created by Cho et al. (2018). See Appendix E. In the creation of this scale, *lovingkindness-compassion* was defined as the following: "a feeling of being touched by a person's suffering, wanting to help them (compassion), and wishing them to be happy (loving-kindness), which arise from a deep insight that all beings are connected (universality)" (Cho et al., 2018, p. 141). The LCS consists of 15 total questions and eight of these questions were selected for the purpose of this study. Eight parallel items to measure state compassion were created and are untested at this time. The Cronbach's alpha for the 15-item LCS is 0.85. In this sample, the Cronbach's alpha for the eight trait items used is .78. The Cronbach's alpha for the untested state items is .70. Items are rated on a 5-point Likert scale ranging from *not at all true of me* to *very true of me*.

Professional Quality of Life

Compassion fatigue was assessed using the Professional Quality of Life Scale (ProQOL) designed by Stamm (2010). See Appendix F. Professional quality of life is the overall quality an individual feels in relation to their work as a helper and incorporates two aspects, the positive (Compassion Satisfaction) and the negative (Compassion Fatigue) (Stamm, 2010). Compassion fatigue is broken into two further components: burnout and secondary traumatic stress. The survey consists of 30 items rated on a 5-point Likert scale. The ProQOL is scored in sections across three domains to give an overall picture of an individual's professional quality of life. The compassion satisfaction domain includes items such as, "I get satisfaction from being able to [help] people," and has an alpha reliability of 0.88. The burnout domain includes items such as "I feel trapped by my job as a helper" and has an alpha reliability of 0.75. The secondary traumatic

stress domain includes items such as "I feel depressed because of the traumatic experiences of the people I [help]," and has an alpha reliability of 0.81. To score, selected items are reversed; items are scored by subscale, and raw scores are converted to T-scores (Stamm, 2010). In this sample, the Cronbach's alpha was .84 for the compassion satisfaction domain. The Cronbach's alpha for the burnout domain was .76 (run using reverse scored items). The Cronbach's alpha for the secondary traumatic stress domain was .77.

Awe Experience

Awe experience was measured by the Awe Experience Scale (AWE-S) created by Yaden, et al. (2018). See Appendix G. This scale is composed of 30 items, designed to be administered directly following an experience of awe. Individuals are instructed to answer the questions regarding an experience of awe they just had. Questions include items such as "I felt my sense of self become somehow smaller." The AWE-S has six subscales: (F1) altered time perception, (F2) self-diminishment, (F3) connectedness, (F4) vastness, (F5) physical sensations, and (F6) need for accommodation. The AWE-S has a Cronbach alpha of 0.92 and is scored by taking the average of all items with no reverse items. Permission for the use of the AWE-S has been obtained from David B. Yaden (2018). In this sample, the Cronbach's alpha for the 30 AWE-S items was .96.

Chapter 3

Results

Analyses were conducted using IBM SPSS Statistics software (Version 21, release 21.0.0.0 64 bit edition). Descriptive statistics for all measures were run for both control and intervention groups. Please see Tables 1 and 2.

Table 1

Descriptive Statistics for Intervention Group

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Dispositional awe total	52	30.10	6.31	-.56	.33	.13	.65
LCS trait total	52	31.58	3.96	-.24	.33	-.33	.65
LCS state total	52	29.54	4.80	-.39	.33	.00	.65
AWES F1: Time dilation	49	23.60	6.74	-.75	.34	.67	.67
AWES F2: Self diminishment	49	19.57	8.24	-.15	.34	-.94	.67
AWES F3: Connectedness	49	21.16	8.18	-.250	.34	-.67	.67
AWES F4: Vastness	49	26.31	7.42	-1.25	.34	1.21	.67
AWES F5: Physical sensations	49	15.61	6.57	-.08	.34	-.84	.67
AWES F6: Accommodation	49	17.14	6.39	-.08	.34	-.73	.67
AWES Total	49	123.39	33.24	-.77	.34	.50	.67

PROQOL: Compassion satisfaction	49	41.49	4.74	-.37	.34	-.19	.67
PROQOL: Burnout	49	21.88	4.74	-.05	.34	.59	.67
PROQOL: Secondary Traumatic Stress	49	23.47	5.15	.67	.34	.53	.67
Valid N (listwise)	49						

Table 2

Descriptive Statistics for Control Group

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Dispositional awe total	46	31.74	5.26	-.01	.35	-.95	.69
LCS trait total	46	31.33	3.88	-.39	.35	-.44	.69
LCS state total	46	29.04	4.82	-.01	.35	-.89	.69
AWES F1: Time dilation	44	20.34	7.11	-.40	.357	-.54	.70
AWES F2: Self diminishment	44	14.89	6.83	.12	.357	-.91	.70
AWES F3: Connectedness	44	15.64	7.46	.45	.357	-.24	.70
AWES F4: Vastness	44	16.00	6.86	-.33	.357	-.98	.70
AWES F5: Physical sensations	44	8.82	5.08	1.01	.357	-.32	.70
AWES F6: Accommodation	44	14.60	8.12	.65	.357	-.36	.70
AWES total	44	90.27	30.41	-.21	.357	-.78	.70
PROQOL: Compassion satisfaction	43	40.60	5.69	-.493	.361	-.20	.71
PROQOL: Burnout	43	23.56	5.84	.60	.361	.41	.71
PROQOL: Secondary traumatic stress	43	24.51	6.00	.76	.361	-.16	.71
Valid N (listwise)	43						

Hypothesis 1

It was hypothesized that in both intervention and control groups, individuals who had more dispositional awe would also have high levels of trait and state compassion. A bivariate correlation was run between the awe subscale of the Dispositional Positive Emotion Scale (DPES) and both the state and trait scores (averaged total) from the LovingKindness Compassion Scale (LCS). Participant's responses revealed a statistically significant positive correlation between dispositional awe and trait compassion, r (98) = .53, p < .00. Participant's responses also revealed a statistically significant positive correlation between dispositional awe and state compassion, r (98) = .60, p < .00. It should be noted once more that the LCS consists of 15 total questions and only eight of these questions were selected for the purpose of this study, alongside of eight parallel items to measure state compassion that are untested at this time. The high correlation between state and trait compassion, r (98) = .90, p <.01, suggests that the two constructs overlap a great deal. This could mean either that state and trait compassion are mostly indistinguishable or that the items constructed for purposes of this study do not adequately discriminate state from trait compassion. For this reason, results should be interpreted with some caution. See Table 3.

Hypothesis 2

It was hypothesized that in the intervention group, awe and compassion satisfaction would be higher, and compassion fatigue would lower compared to the control group. To ensure that the dispositional awe scale given in the pre-intervention did not influence participant's results on the AWE-S, an independent samples t-test was run. Participants in the intervention group (M = 30.10, SD = 6.31) did not differ significantly from participants in the control group (M = 31.74, SD = 5.26), and the Levene's test assumed equal variance, t(96) = -1.39, p = .47.

Table 3

Awe Experience, Trait Compassion, and State Compassion Correlations

		Dispositional Awe Total	LCS Trait Total	LCS State Total
Dispositional awe total	Pearson Correlation	1	.53**	.60**
	Sig. (2-tailed)		.00	.00
	N	98	98	98
LCS trait total	Pearson Correlation	.53**	1	.90**
	Sig. (2-tailed)	.00		.00
	N	98	98	98
LCS state total	Pearson Correlation	.60**	.90**	1
	Sig. (2-tailed)	.00	.00	
	N	98	98	98

Note. ** Correlation is significant at the 0.01 level (2-tailed).

Next, a MANOVA was conducted to evaluate the differences between the control group and the experimental group on awe, compassion satisfaction, and compassion fatigue (as measured by burnout and secondary traumatic stress on the ProQOL). The MANOVA showed a significant difference between groups, F (4, 87) = 6.37, $p < .00$; Wilk's $\Lambda = .77$, partial $\eta^2 = .23$. However, only awe experience was found to be significant, F (1, 90) = 23.96, $p < .00$. The univariate ANOVA for compassion satisfaction was not significant F (1,90) = .66, $p < .418$. The univariate ANOVA for burnout was not significant, F (1, 90) = 2.32, $p < .13$. The univariate ANOVA for secondary traumatic stress was not significant, F (1, 90) = .81, $p < .37$. Tests of this hypothesis were corrected using Bonferroni adjusted alpha levels of .0125. Consequently, the ANOVA results for awe experience remained significant, while the results for compassion satisfaction, burnout, and secondary traumatic stress remained non-significant.

Additional Analyses

Due to the fact that the awe video condition was created specifically for this study, and had not been tested previously, follow-up analyses were run to explore which aspects of awe experience were strongest following watching the experimental video. A one-way ANOVA was conducted to evaluate differences in awe-experience subscales between the intervention group and control group. A Bonferroni adjusted level of .008 was used to prevent a Type I error. The ANOVA for the following four subscales was significant: self-diminishment, F (1, 91) = 8.80, $p < .00$, partial $\eta^2 = .09$; connectedness, F (1, 91) = 11.50, $p < .00$, partial $\eta^2 = .11$; vastness F (1, 91) = 48.04, $p < .00$, partial $\eta^2 = .35$; physical sensations F (1, 91) = 30.60, $p < .00$, partial $\eta^2 = .25$.. The ANOVA for the following two subscales was not significant: time dilation F (1, 91) = 5.12, $p < .03$, partial $\eta^2 = .05$; accommodation F (1, 92) = 2.87, $p < .09$, partial $\eta^2 = .03$. See Table 4 for descriptive statistics of the AWES subscales.

Table 4

Descriptive Measures for AWES Subscales

		N	Mean	Std. Deviation
AWES F1: Time dilation	1.00	49	23.59	6.74
	2.00	44	20.34	7.11
	Total	93	22.05	7.07
AWES F2: Self diminishment	1.00	49	19.57	8.24
	2.00	44	14.89	6.83
	Total	93	17.35	7.92
AWES F3: Connectedness	1.00	49	21.16	8.18
	2.00	44	15.64	7.46
	Total	93	18.55	8.29
AWES F4: Vastness	1.00	49	26.31	7.42
	2.00	44	16.00	6.86
	Total	93	21.43	8.80
AWES F5: Physical sensations	1.00	49	15.61	6.57
	2.00	44	8.82	5.08
	Total	93	12.40	6.80
AWES F6: Accommodation	1.00	49	17.14	6.39
	2.00	44	14.59	8.12
	Total	93	15.94	7.33

Chapter 4

Discussion

Results of the present study support the premise that experiences of awe and the experience of exuding compassion may be linked and opens a door for future research in this area. This study was originally designed to measure both pre and post data of compassion satisfaction and compassion fatigue, with longer intervention videos and in-person data collection that included the collection of physiological measures (skin conductance). Unfortunately, due to the impact of the COVID-19 pandemic, this research was not able to be carried forward with this original design, which would have offered a more robust look at the connection between awe and compassion. The design was shortened for the purpose of reducing attrition rates for participants engaging in an online survey. However, the present design still sheds light on a significant connection between the human disposition towards experiencing awe and both trait and state compassion levels. This relationship suggests that individuals who are naturally able to provide compassion for others in their lives, and therefore are likely to pursue careers where compassionate care for others is a key component, are also naturally dispositioned to seek out and experience awe in their lives.

Further, results of this study added to the existing literature revealing that even short video clips of nature are sufficient in eliciting an awe-experiences. The length of the video for this study was shortened considerably from the original plan (from planned 3 minutes to current 1 minute and 30 seconds), yet still yielded meaningful results that differed significantly from the

control group. This is noteworthy for future research conducted in studying awe experience and provides additional supporting data alongside of key researchers such as Van Elk et al. (2019), Chirico et al. (2017), and Yaden et al. (2018), among others, in confirming this. However, the predicted change in the measures of compassion satisfaction and compassion fatigue following the awe experience did not occur. No meaningful difference was found in participant levels of overall professional quality of life, including compassion satisfaction, as well as levels of both burnout and secondary traumatic stress, following the intervention video.

The follow-up analyses revealed notable features of the awe intervention video that was designed specifically for this study. The videographer, Britton Holman, reported he shot the video footage at Silver Falls, Oregon with the intention of capturing the interplay of light and nature, including clips of sunlight refracting off of green tree leaves and sun rays highlighting the beauty of the waterfall. It is possible that this unique design element could have impacted both the participant's sense of how vast the scenery was, as well as the experience of physical sensations (such as being able to viscerally imagine the warmth of the sunlight), which were the two elements of the awe experience following the intervention video that participants reported most strongly, with large effect sizes. Sensations of connectedness and self-diminishment had medium effect sizes, while experiences of accommodation and time-diminishment had small, insignificant effect sizes.

Limitations

There were some limitations to this study. The participants who completed the survey were disproportionately white and female, which cannot be extrapolated to the entire population of graduate students in helping professional programs. Additionally, the sample was collected from individuals all attending the same private university in the Pacific Northwest region of the

United States, and a more representative sample might have been obtained by diversifying the location and type of colleges included in the sample. Additionally, at the beginning of the awe intervention video it was stated in small writing on the screen that the location of the footage was from Silver Falls, Oregon, and no measures were taken to control for possible feelings of familiarity or nostalgia participants may have had for this well-loved location in the State of Oregon. It is entirely possible that familiarity or nostalgia could have aided in increasing or decreasing a participant's experience of awe, which might have influenced final results.

Further, the PROQOL scale was chosen because this study aimed to look specifically at helping professionals in graduate programs. The overall goal of the PROQOL is to measure professional quality of life, and while it incorporates compassion satisfaction and compassion fatigue, a purer measure of compassion may have afforded a different result than the one obtained. It would be interesting to use a different measure, such as Pommier et al.'s (2019) Compassion Scale (CS) in future research examining the relationship between awe and compassion.

Finally, the impact of the COVID-19 pandemic on this study is unknown, and it is possible that experiences of awe and compassion may have been more difficult to measure in this unprecedented time. The novelty of COVID-19 pandemic renders the event an enigma in present research, and future studies may identify ways in which this event has shifted or impacted the health and wellbeing of individuals across the world. The context of the COVID-19 pandemic should be considered when interpreting these results.

Implications

One of the core implications of this study is that it is possible to induce meaningful feelings of awe in a relatively short period of time. This is a reminder that self-care through

engaging in experiences that induce awe, big or small, are both important and meaningful and do not have to be done on a grand scale to have impact. Rather, taking a few moments to look out of a window, look at a picture of a beautiful place to which you have been, or stepping outside to stand in the sun may all be small ways to create various sensations of awe. Additionally, this means that research surrounding awe can be done in a laboratory environment, as well as through in-vivo experiences, such as being outdoors in nature.

However, it has been well established that the working definition of an awe experience requires two components: the stimulus must be vast and it must require accommodation (Keltner & Haidt, 2003). In this study we saw the presence of vastness (as measured by the AWES) but analysis revealed the experience of accommodation was missing for participants. While this makes sense due to the brevity of the awe intervention video, and the subsequent small time period for accommodation or shifting of perspective to occur, it illuminates the possibility that it might take longer exposure periods and/or experiences of awe repeated over time to create a scenario where *both* vastness and accommodation are present. Accommodation appears to be central to perspective taking and moving beyond the self to come into contact with something "deep or numinous" in the awe experience, as described by Schneider (2011). This ties together with the core component of compassion, which is the ability for an individual move beyond themselves in order to encounter and hold suffering alongside of another (Lomas, 2015). The lack of accommodation experienced by participants in this study points to the idea that accommodation is central to both perspective taking in experiences awe, as well as in exuding compassion, and both accommodation and vastness may have needed to be present for enduring changes in compassion to have been seen in our data.

Future Directions

Given that accommodation seemed to be a central component missing from the awe experience simulated in the present research, future directions for research exploring the relationship between awe and compassion should aim to narrow in on creating an awe experience that elicits both vastness and accommodation. It is a new and lingering hypothesis that accommodation may serve as a poxy between awe and compassion, and the question remains regarding whether experiences of awe can help sustain compassion fatigue and burnout for helping professional graduate trainees who must continuously move beyond the self to help another. From the present research we know that a relationship exists between awe and compassion, and the door is open for this to be taken further to identify more clearly and precisely how awe might be harnessed for helping young professionals in high stress graduate programs.

Aside from accommodation, the second largest effect of the awe intervention video in this study was physical sensation, and the initial plan (pre COVID-19 pandemic) was to measure skin conductance as a way to observe what happens in the body during experiences of awe. It would be interesting to have a better understanding surrounding what caused participants in this study to experience physical sensations accompanying awe. More robust data may be collected by incorporating the collection of physiological data down the road, when it becomes safe to do so once again. Skin conductance in particular has solid empirical links to awe, and this galvanic response has even been shown to help distinguish awe from other emotions (Stellar et al., 2015). This component, alongside of possible longer awe interventions and an inclusion of pre and post measures for compassion, would fill in gaps left by the present study.

Finally, it may be an interesting exploratory direction to examine the relationship between light refraction and awe experience. It is debatable that the aesthetics of nature are best viewed in good lighting, whether this is in a bright night sky or during the day, and the present awe intervention video stands out for its inclusion of this unique component. The aesthetics of light and the way it reflects and illuminates the world we live in could be an interesting facet of awe to examine closer down the road.

References

Allen, S. (2018). The science of awe: A white paper prepared for the John Templeton Foundation by the Greater Good Science Center at UC Berkeley.

Anderson, C. L., Monroy, M., & Keltner, D. (2018). Awe in nature heals: Evidence from military veterans, at-risk youth, and college students. *Emotion*, *18*(8), 1195–1202

Andreychik. (2019). Feeling your joy helps me to bear feeling your pain: Examining associations between empathy for others' positive versus negative emotions and burnout. *Personality and Individual Differences, 137*, 147-156.

Chirico, A., Cipresso, P., Yaden, D. B., Biassoni, F., Riva, G., & Gaggioli, A. (2017) Effectiveness of immersive videos in inducing awe: An experimental study. *Sci Rep 7,* 1218 (2017) doi:10.1038/s41598-017-01242-0

Cho, H., Noh, S., Park, S., Ryu, S., Misan, V., & Lee, J. (2018) The development and validation of the LovingKindness-Compassion Scale. *Personality and Individual Differences, 124,* 141-144.

Clay, R. A. (2001) Green is good for you. American Psychological Association, *32*(4), 40-41. https://www.apa.org/monitor/apr01/greengood

Dickerson, S. S., Kemeny, M. E., Aziz, N., Kim, K. H., & Fahey, J. L. (2004). Immunological effects of induced shame and guilt. *Psychosomatic Medicine, 66,* 124–131. http://dx.doi.org/10.1097/01.PSY .0000097338.75454.29

Figley, C. R. (2002). Compassion fatigue: Psychotherapists' chronic lack of self care. *Psychotherapy in Practice, 58,* 1433–1441.

Goetz, J. L., Keltner, D., & Simon-Thomas, E. (2010). Compassion: An evolutionary analysis and empirical review. *Psychological Bulletin*, *136*(3), 351–374. https://doi-org.georgefox.idm.oclc.org/10.1037/a0018807

Golland, Y., Keissar, K., & Levit, B. N. (2014). Studying the dynamics of autonomic activity during emotional experience. *Psychophysiology*, *51*(11), 1101–1111. https://doi-org.georgefox.idm.oclc.org/10.1111/psyp.12261

Griffith, J. L., & Griffith, M. E. (2002). *Encountering the sacred in psychotherapy: How to talk with people about their spiritual lives*. New York, NY: Guilford Press. http://search.ebscohost.com.georgefox.idm.oclc.org/login.aspx?direct=true&db=psyh&AN=2001-05467-000&scope=site

Hunter, S. V. (2012). Walking in sacred spaces in the therapeutic bond: Therapists' experiences of compassion satisfaction coupled with the potential for vicarious traumatization. *Family Process*, *51*(2), 179–192. https://doi-org.georgefox.idm.oclc.org/10.1111/j.1545-5300.2012.01393.x

Kiecolt-Glaser, J. K., McGuire, L., Robles, T. F., & Glaser, R. (2002). Emotions, morbidity, and mortality: New perspectives from psychoneuroimmunology. *Annual Review of Psychology*, *53*(1), 83–107.

Keltner, D. (2016). Why do we feel awe? *Mindful: Taking Time for What Matters*. http://www.mindful.org/why-do-we-feel-awe/

Keltner, D., & Haidt, J. (2003). Approaching awe, a moral, spiritual, and aesthetic emotion. *Cognition & Emotion*, *17*(2), 303

Killian, K. (2008). Helping till it hurts? A multimethod study of compassion fatigue, burnout, and self-care in clinicians working with trauma survivors. *Traumatology, 14*(2), 32-44.

Lomas, T. (2015). Self-transcendence through shared suffering: An intersubjective theory of compassion. *Journal of Transpersonal Psychology, 47*(2), 168-187

Myers, S. B., Sweeney, A. C., Popick, V., Wesley, K., Bordfeld, A., & Fingerhut, R. (2012). Self-care practices and perceived stress levels among psychology graduate students. *Training and Education in Professional Psychology*, *6*(1), 55–66.

National Alliance on Mental Illness. (2019). Mental health by the numbers. https://nami.org /Learn-More/Mental-Health-By-the-Numbers

Newsome, S., Waldo, M., & Gruszka, C. (2012). Mindfulness group work: Preventing stress and increasing self-compassion among helping professionals in training. *Journal for Specialists in Group Work, 37*(4), 297–311.

O'Brien, J. L., & Haaga, D. A. F. (2015). Empathic accuracy and compassion fatigue among therapist trainees. *Professional Psychology: Research and Practice*, *46*(6), 414–420.

Otway, L. J., & Carnelley, K. B. (2013). Exploring the associations between adult attachment security and self-actualization and self-transcendence. *Self and Identity*, *12*(2), 217–230.

Pearlman, L. A., & Mac Ian, P. S. (1995). Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. *Professional Psychology: Research and Practice, 26,* 558 –565.

Piff, P. K., Dietze, P., Feinberg, M., Stancato, D. M., & Keltner, D. (2015). Awe, the small self, and prosocial behavior. *Journal of Personality and Social Psychology*, *108*(6), 883–899.

Pommier, E., Neff, K. D. & Tóth-Király I. (2019). The development and validation of the Compassion Scale. *Assessment,* 1-19. DOI: 10.1177/1073191119874108.

Rockwell, D. (2019). What's love got to do with it? *The Humanistic Psychologist*. https://doi-org.georgefox.idm.oclc.org/10.1037/hum0000128

Schneider, K. (2009). Awakening to awe: Personal stories of profound transformation. Lanham, MD: Aronson.

Schneider, K. J. (2011). Awakening to an awe-based psychology. *The Humanistic Psychologist*, *39*(3), 247–252.

Shiota, M. N., Campos, B., & Keltner, D. (2003). The faces of positive emotion: Prototype displays of awe, amusement, and pride. *Annals of the New York Academy of Sciences, 1000,* 296–299.

Shiota, M. N., Keltner, D., & John, O. P. (2006). Positive emotion dispositions differentially associated with Big Five personality and attachment style. *The Journal of Positive Psychology, 1*(2), 61-71.

Shiota, M. N., Neufeld, S. L., Yeung, W. H., Moser, S. E. & Perea, E. F. (2011). Feeling good: Autonomic nervous system responding in five positive emotions. *Emotion 11*, 1368–78, doi: 10.1037/a0024278.

Silvia, P. J., Fayn, K., Nusbaum, E. C., & Beaty, R. E. (2015). Openness to experience and awe| in response to nature and music: Personality and profound aesthetic experiences. *Psychology of Aesthetics, Creativity, and the Arts*, *9*(4), 376–384.

Skovholt, T. M. (2005). The cycle of caring: A model of expertise in the helping professions. *Journal of Mental Health Counseling*, *27*(1), 82–93.

Stamm, B. H. (2010). The concise ProQOL manual (2nd ed.). Pocatello, ID: ProQOL.org.

Stellar, J. E., Manzo, V. M., Kraus, M. W., & Keltner, D. (2011). Class and compassion: Socioeconomic factors predict responses to suffering. *Emotion, 12,* 449 – 459. http://dx.doi.org/10.1037/a0026508

Stellar, J. E., John-Henderson, N., Anderson, C. L., Gordon, A. M., McNeil, G. D., & Keltner, D. (2015). Positive affect and markers of inflammation: Discrete positive emotions predict lower levels of inflammatory cytokines. *Emotion*, *15*(2), 129–133. https://doi.org/10.1037/emo0000033

Stellar, J. E., Gordon, A. M., Piff, P. K., Cordaro, D., Anderson, C. L., Bai, Y., Maruskin, L. A., & Keltner, D. (2017). Self-transcendent emotions and their social functions: Compassion, gratitude, and awe bind us to others through prosociality. *Emotion Review*, *9*(3), 200–207

Tierney, S., Ozer, C.-T., & Perry, S. (2018). Having the "headspace" for compassion toward self and others: A qualitative study of medical students' views and experiences. *Teaching and Learning in Medicine*, *30*(3), 274–283. https://doi-org.georgefox.idm.oclc.org/10.1080/10401334.2018.1423973

Van Berkel, K., & Reeves, B. (2017). Stress among graduate students in relation to health behaviors. *College Student Journal*, *51*(4), 498–510.

Van Elk, M., Arciniegas Gomez, M. A., van der Zwaag, W., van Schie, H. T., & Sauter, D. (2019). The neural correlates of the awe experience: Reduced default mode network activity during feelings of awe. *Human Brain Mapping*, *40*(12), 3561–3574.

Yaden, D. B., Iwry, J., Slack, K. J., Eichstaedt, J. C., Zhao, Y., Vaillant, G. E., & Newberg, A. B. (2016). The overview effect: Awe and self-transcendent experience in space flight. *Psychology of Consciousness: Theory, Research, and Practice*, *3*(1), 1–11.

Yaden, D. B, Kaufman, S. B, Hyde, E., Chirico, A., Gaggioli, A., Zhang, J. W., Keltner, D. (2018). The development of the Awe Experience Scale (AWE-S): A multifactorial measure for a complex emotion, *The Journal of Positive Psychology*.

Appendix A

Demographic Questionnaire

1. Are you over the age of 18?
2. Age
3. Gender
4. Ethnicity
5. What kind of graduate training program are you currently enrolled in?
6. What year are you in your graduate training program?

Appendix B

Informed Consent for Participation in Research

"This study has been created to assess general health and wellbeing in graduate school trainees in helping professions. The survey will take approximately 10-15 minutes of your time to complete. Your participation in this survey may be beneficial for the future wellbeing of graduate students. Your participation and answers will remain entirely anonymous throughout the course of this study and after the completion of this study, meaning that no one will ever know your survey was yours. If you feel uncomfortable at any time during this survey, you are free to discontinue. By beginning this survey, you are consenting to participate in this study. By completing and submitting this survey you are acknowledging that your answers are truthful and are your own experience(s) and you consent your answers may be used for research purposes. If you have any questions, comments, or concerns regarding this research, please contact the lead investigator, Anna Forcelle, MA at aforcelle17@georgefox.edu or the faculty supervisor, Marie-Christine Goodworth, PhD at mgoodworth@georgefox.edu at George Fox University Graduate School of Clinical Psychology, 414 N Meridian St. V104, Newberg, OR, 97123."

In order to move forward with the online survey, participants needed to check a box agreeing to the following: "I have read and understood the explanation provided to me and agree to participate in this research study."

Appendix C

Fair Use Evaluation Documentation

Fair Use Evaluation Documentation

Compiled using the **Fair Use Evaluator** [cc] 2008 Michael Brewer & the Office for Information Technology Policy, http://librarycopyright.net/fairuse/

Name:	Anna Forcelle
Job Title:	PsyD Doctoral Candidate
Institution:	George Fox University
Title of Work Used:	Tractors at Work I Ploughing
Copyright Holder:	onnitokizawa
Publication Status:	Published
Publisher:	Independent
Place of Publication:	YouTube
Publication Year:	2018
Description of Work:	Various kinds of tractors ploughing in fields.
Date of Evaluation:	February 5, 2020
Date of Intended Use:	March 1, 2020

Describe the Purpose and Character of Your Intended Use:

I am currently a third year doctoral student in George Fox University's clinical psychology program (PsyD). I am working towards the completion of my doctoral dissertation, which is titled: "Awe in the Helping Professions: Approaching Well-Being for Graduate Trainees Through Transcendent Emotion." I have created an experimental design that has been formally approved by my dissertation committee and will be approved by Oregon's institutional review board. As part of my design, my intent is to use a short clip (2-4 minute) of this video as a control video containing neutral stimuli (tractors working in fields). This video will be used in opposition to a video with awe inducing stimuli (beautiful landscape).

This video has already been published on YouTube with clear attribution to the creator. I will only be using a portion of the work in question.
[+] My use of the video is socially beneficial (promotes the creation of new knowledge, learning, etc.). I plan to use the video clip in question for research and scholarship, with a small experimental group of students.
[+] Use is not-for-profit, as it will be published in an institutional repository with open access for all.
[+] Use is clearly defined and is restricted in scope (limited duration, not iterative, restricted access, etc.) I am limiting the use of the video clip to a study group.

Fair ☑ ☐ ☐ ☐ ☐ ☐ ☐ Unfair

Page 1

Describe the Nature of Your Intended Use of the Copyrighted Work:

[+] Work to be used has been previously PUBLISHED. The work is a video on creator oonitokizawa's YouTube channel (Farmer Love Tractor- FLT), and I will give this creator proper credit.
[+] Work to be used is primarily of a factual nature (non-fiction, collection of facts, etc.). The video is footage of tractors ploughing in fields.
[+] Original work was not created and/or has not been marketed for the stated purpose of the proposed use. The video was not created or intended for use as a research intervention.

Fair — Unfair

Describe the Amount of Your Intended Use in Relation to the Copyrighted Work as a Whole:

[+] Only limited and reasonable portions will be used. I plan to use a 2-4 minute clip of the video (the original work is 12.25 minutes).
[+] The portion used is not the "heart" of the work (the portion considered most central to the work as a whole). As the video is drone footage of Mt. Hood, OR and the surrounding area, the content is consistent throughout the video of forested landscape and sky.
[+] Only the amount required to achieve the stated, socially-beneficial purpose or objective will be used (be that educational, artistic, scholarly, journalistic, etc.). The length of video I have chosen is reflective of the literature review conducted concerning the topic of awe.

Fair — Unfair

Describe the Effect of Your Intended Use on the Potential Market or Value of the Copyrighted Work:

[+] A market for the work as it will be used is absent or is negligible & use of the work will have little or no negative impact on its value or potential value. The video is published on the creator's personal YouTube page, and as my use is for research purposes, there will be no effect on the creator's page.
[+] Proper attribution will be given with the intended use. I plan to give the creator credit and will site the use of the video following APA guidelines.

Fair — Unfair

The Average "Fairness Level," Based on Your Rating of Each of the 4 Factors, Is:

[see tool disclaimer for important clarifying information]:

Based on the information and justification I have provided above, I, Anna Forcelle, am **UNDECIDED** whether this use if fair under Section 107 of the U.S. Copyright Code.

Signature: _____

Date of Signature: _____

***Disclaimer:** This document is intended to help you* collect, organize & archive the information you might need to support your fair use evaluation. *It is not a source of legal advice or assistance. The results are only as good as the input you have provided by are intended to suggest next steps, and not to provide a final judgment. It is recommended that* you share this evaluation with a copyright specialist before proceeding with your intended use.

Appendix D

Dispositional Positive Emotion Scale (DPES)

Awe Subscale

1. I often feel awe.
2. I see beauty all around me.
3. I feel wonder almost every day.
4. I often look for patterns in the objects around me.
5. I have many opportunities to see the beauty of nature.
6. I seek out experiences that challenge my understanding of the world.

7-point Likert scale ranging from 1, *strongly disagree* to 7, *strongly agree*

Appendix E

The LovingKindness-Compassion Scale (LCS)

Loving-Kindness Compassion Scale (modified)

T1. I feel stable and peaceful.
S1. Right now, I feel secure and at peace.

T2. I feel a warm heart towards toward whomever I meet.
S2. I am feeling warm-hearted towards humankind in this moment.

T3. I am fine just the way I am.
S3. Presently, I feel content with who I am, just the way I am.

T4. I am thankful for all living things in the world
S4. I am aware of how thankful I am for all living things in the world.

T5. When I see troubled or suffering people, I would like to help them without expecting any compensation.
S5. Right at this moment I am feeling a tenderness for those in trouble, and wish I could do something to help.

T6. I feel sorry for those people in pain even if I may dislike them.
S6. I am feeling sad right now for people in pain, even those I may dislike.

T7. I empathize with those whose hearts are wounded.
S7. Presently, I feel empathy towards those whose hearts are wounded.

T8. I believe that all living things are connected to one another.
T8. Right at this moment I am aware of the inter-connectedness of all things.

Appendix F

Professional Quality of Life Scale (PROQOL)

Compassion Satisfaction and Compassion Fatigue (ProQOL) Version 5 (2009)

When you *[help]* people you have direct contact with their lives. As you may have found, your compassion for those you *[help]* can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as a *[helper]*. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the *last 30 days*.

1=Never 2=Rarely 3=Sometimes 4=Often 5=Very Often

1. I am happy.
2. I am preoccupied with more than one person I *[help]*.
3. I get satisfaction from being able to *[help]* people.
4. I feel connected to others.
5. I jump or am startled by unexpected sounds.
6. I feel invigorated after working with those I *[help]*.
7. I find it difficult to separate my personal life from my life as a *[helper]*.
8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I *[help]*.
9. I think that I might have been affected by the traumatic stress of those I *[help]*.
10. I feel trapped by my job as a *[helper]*.
11. Because of my *[helping]*, I have felt "on edge" about various things.
12. I like my work as a *[helper]*.
13. I feel depressed because of the traumatic experiences of the people I *[help].*
14. I feel as though I am experiencing the trauma of someone I have *[helped]*.
15. I have beliefs that sustain me.
16. I am pleased with how I am able to keep up with *[helping]* techniques and protocols.
17. I am the person I always wanted to be.
18. My work makes me feel satisfied.
19. I feel worn out because of my work as a *[helper].*
20. I have happy thoughts and feelings about those I *[help]* and how I could help them.

21. I feel overwhelmed because my case [work] load seems endless.
22. I believe I can make a difference through my work.
23. I avoid certain activities or situations because they remind me of frightening experiences of the people I *[help]*.
24. I am proud of what I can do to *[help]*.
25. As a result of my *[helping]*, I have intrusive, frightening thoughts.
26. I feel "bogged down" by the system.
27. I have thoughts that I am a "success" as a *[helper]*.
28. I can't recall important parts of my work with trauma victims.
29. I am a very caring person.
30. I am happy that I chose to do this work.

Appendix G

The Awe Experience Scale (AWE-S)

Scale Instructions: Please answer the following questions about a recent, intense experience of awe. While you may have had other experiences that are relevant to the following questions, please answer only about this current experience.

Randomize Items. Use 7-point scale: 1= Strongly Disagree; 2 = Moderately Disagree; 3 = Somewhat Disagree; 4 = Neutral; 5 = Somewhat Agree; 6= Moderately Agree; 7 = Strongly Agree

1. I sensed things momentarily slow down.
2. I noticed time slowing.
3. I felt my sense of time change.
4. I experienced the passage of time differently.
5. I had the sense that a moment lasted longer than usual.
6. I felt that my sense of self was diminished.
7. I felt my sense of self shrink.
8. I experienced a reduced sense of self.
9. I felt my sense of self become somehow smaller.
10. I felt small compared to everything else.
11. I had the sense of being connected to everything.
12. I felt a sense of communion with all living things.
13. I experienced a sense of oneness with all things.
14. I felt closely connected to humanity.
15. I had a sense of complete connectedness.
16. I felt that I was in the presence of something grand.
17. I experienced something greater than myself.
18. I felt in the presence of greatness.
19. I perceived something that was much larger than me.
20. I perceived vastness.
21. I felt my jaw drop.
22. I had goosebumps.
23. I gasped.
24. I had chills.
25. I felt my eyes widen.
26. I felt challenged to mentally process what I was experiencing.
27. I found it hard to comprehend the experience in full.
28. I felt challenged to understand the experience.
29. I struggled to take in all that I was experiencing at once.
30. I tried to understand the magnitude of what I was experiencing.

Each factor as well as the total score should be averaged. There are no reverse scored items.
Factor 1: Time Dilation. average of items 1-5
Factor 2: Self-Diminishment. average of items 6-10
F3: Connectedness. average of items 11-15
F4: Vastness. average of items 16-20
F5: Physical Sensations. average of items 21-25
F6: Need for Accommodation. average of items 26-30
AWE-S Total. average of items 1-3

Appendix H
Curriculum Vitae

ANNA B. FORCELLE

CURRICULUM VITAE

aforcelle17@georgefox.edu

EDUCATION

2017—Present
Newberg, OR

GEORGE FOX UNIVERSITY
Doctorate in Clinical Psychology (PsyD)
☆APA-Accredited

- Anticipated Graduation Date: May 2022
- Cumulative GPA: 3.974
- Academic Advisor: Marie-Christine Goodworth, PhD
- Dissertation Title: *Awe in the Helping Professions: Approaching Graduate Trainee Well-Being* through *Transcendent Emotion* (Proposal Completed December 2019)
- Committee: Marie-Christine Goodworth, PhD, Mark McMinn, PhD, Brooke Kuhnhausen, PhD

April 2019
Newberg, OR

GEORGE FOX UNIVERSITY
Master of Arts in Clinical Psychology (M.A)

2013—2017
Cedarville, OH

CEDARVILLE UNIVERSITY
Bachelor of Arts in Psychology (B.A)

- Cumulative GPA: 3.92
- High Honors

SUPERVISED CLINICAL EXPERIENCE

Aug 2020—Present
Portland, OR
Pre-Internship

Portland Mental Health and Wellness
Setting Type: Group Private Practice
Position: Doctoral Extern Therapist

Portland Mental Health and Wellness is a group private practice run collaboratively among mental health practitioners from various disciplines. PMHW offers mental health therapy services to young adults and adults in the metro-Portland area with a variety of diverse and intersecting identities, ranging in race, ethnicity, socio-economic status, and gender/sexual identity.

Clinical Supervisors: Christopher Raines, PhD (primary); Leonard Kaufman, PhD (secondary); Del Rapier, PsyD (training director); Jon Frew, PhD (process group supervisor).

- Clinical Interventions:
  - Provided telehealth therapy services in lieu of in-person services due to the COVID-19 pandemic via secure and HIPAA compliant video platforms (i.e GoogleMeet and Doxy.me).
  - Provided intake assessments and client consultations to determine goodness of fit for therapy services.

- Provided short-term and long-term telehealth therapy services (20+ sessions) to young adults, college-aged students from local universities, and adults.
- Managed a full client caseload (10+ therapy clients), managing back-to-back therapy appointments, necessitating succinct and efficient chart-keeping.
- Received direct supervision from staff psychologists through gestalt, psychodynamic, and other person-focused and process-oriented frameworks, including review of videotaped sessions.
- Received training in the Columbia- Suicide Severity Rating Scale (C-SSRS), certificate training in Counseling on Access to Lethal Means, and conducted risk and safety assessments as indicated in client care.
- Navigated various internal and external referrals for assessment services, including offering coordinated care, due to change of insurance and service needs other than PMHW provides.

- Administrative Responsibilities:
  - Managed level of care insurance designations in working with clients with CareOregon/Oregon Health Plan.
  - Scheduled patients, managed therapy caseload, and documented all patient interactions in electronic clinical chart (TherapyNotes).
  - Navigated client communication needs virtually via email and phone communications.
- Training Experiences:
  - Received weekly individual and group supervision, as well as alternating biweekly didactic training and process group.
  - Participated in bi-weekly, rotating clinical presentations in group supervision, including sharing video-recorded sessions and leading clinical conversation among peers and supervisors.
  - Received ongoing training in cultural diversity and "brave space" work environment with focus on fostering a work culture of inclusion, sensitivity, and humility.

June 2019—June 2020
Salem, OR
Practicum II

WFMC Health
Setting Type: Primary Care
Position: Behavioral Health Consultant and Student Therapist

Clinical Supervisors: April Brewer, PsyD; Ross Bartlett, PsyD

WFMC Health is a non-profit medical clinic offering a broad range of health care services. Services at WFMC are provided to patients across the lifespan. Approximately 65% of the patient population identify within the Latinx community and around 80% of patients are covered by Medicaid insurance.

- Clinical Interventions:
  - Conducted warm-hand-off appointments in collaboration with primary care physicians, including offering crisis care and short-term solution focused interventions.
  - Conducted time-limited behavioral health consultation appointments at the outpatient level.
  - Conducted long-term therapy services (20+ sessions) with patients across the lifespan, including children, adolescents, local college-aged students, and adults.

  - Gained experience in using interpretation services, both in-person and through remote access, to provide services to primarily Spanish/Castilian-speaking patients.
  - Gained experience in crisis care, including suicide intervention and assessment, safety planning, early-intervention psychosis care in children/adolescents, and mandatory DHS reporting.
  - In March of 2020 managed client transition and transfer of all care to telehealth therapy and phone services due to the COVID-19 pandemic.
- Administrative Responsibilities:
  - Managed patient billing under WFMC's managed care system, including OHP and Pacific Source.
  - Scheduled patients, managed therapy caseload, and documented all patient interactions in electronic medical records (NextGen EHR).
- Training Experiences:
  - Participated in weekly individual supervision and weekly process-groups led through a psychodynamic and interpersonal lens.
  - Increased knowledge of contemporary psychodynamic counseling skills and solidified professional confidence in theoretical orientation.
  - Received direct feedback on client care utilizing audio-recording of therapy sessions.
  - Presented a clinical didactic for primary-care providers titled, "A Fresh Perspective on Trauma-Informed Care"

Aug 2019-April 2019
Newberg, OR
Supplemental Training

GEORGE FOX BEHAVIORAL HEALTH CLINIC
Setting Type: Community Mental Health
Position: Assessment Examiner

The assessment clinic of the George Fox BHC is an outpatient community mental health center with an aim to provide low-cost and assessable psychological assessment services to low income, underserved individuals in Yamhill County, OR.

Clinical Supervisor: Kenneth Logan, PsyD

- Provided assessment evaluations for specific learning disorders, ADHD, personality disorders, and emotional/behavioral concerns.
- Example of Assessments:
  - WAIS-IV, WISC-V, WIAT-III, WJ IV, WMS-IV, Conners-3, DKEFS, BASC, MMPI-2, MMPI-RF, MMPI-A, PAI, PAI-A, MCMI-IV, 16PF.
- Wrote psychological integrated reports and provided feedback to clients.

Aug 2018-July 2019
Newberg, OR
Practicum I

GEORGE FOX BEHAVIORAL HEALTH CLINIC
Setting Type: Community Mental Health
Position: Student Therapist

The therapy clinic of the George Fox BHC is an outpatient community mental health clinic serving low income, underserved individuals in Yamhill County, OR.
Clinical Supervisors: Dr. Joel Gregor, Psy.D; Katie Dunbar, MA

- Clinical Interventions:
  - Conducted mental health assessments and clinical intake interviews with cases ranging from high to low levels of risk.
  - Provided outpatient therapy services to individuals across the lifespan (ages 11 to 76) with a variety of mental health and co-occurring disorders, averaging 8-12 sessions per client.
  - Engaged in treatment and safety planning.
  - Explored and formulated therapeutic theoretical orientation with supervisor guidance, providing evidence-based conceptualization and treatments, including emphasis in Cognitive-Behavioral, Person-Centered, psychodynamic, and attachment relations.
- Administrative Responsibilities:
  - Scheduled and managed client appointments.
  - Tracked and managed billing in adherence to the clinic's sliding scale fee system.
  - Utilized Titanium Software for the confidential maintenance of electronic client records and note-keeping in compliance with HIPPA.
- Training Experiences:
  - Participated in weekly individual supervision, group didactics, and clinical teams to encourage informed and collaborative best practice care within the clinic.
  - Participated in didactics, including presented clinical presentations on a rotating schedule.

Jan 2017-May 2018
Newberg, OR
Pre-Practicum

GEORGE FOX UNIVERSITY
Setting Type: University Counseling
Position: Student Therapist

Pre-practicum counseling experience with undergraduate volunteers from George Fox University ranging in age, gender, race/ethnicity, SES status, and religious affiliation

Clinical Supervisor: Glena Andrews, PhD; Annelise Manns, MA

- Conducted individual simulated psychotherapy for undergraduate volunteer students.
- Developed treatment planning and diagnostic impression skills through a person-centered lens.
- Received weekly supervision from a master-level, pre-intern student.
- Bolstered record keeping skills including file care, charting, and reminder contact.

TEACHING AND SUPERVISION EXPERIENCES

GRADUATE TEACHING ASSISTANT AND SUPERVISION OF STUDENTS:

Clinical Foundations I and II, Aug 2020—Present
Supervisor and Course Instructor: Aundrea Paxton, PsyD

- Manage and facilitate a small lab group comprised of four first-year graduate level students to provide training, support, and mentorship as they develop clinical skills and theoretical understanding grounded in Person-Centered theory.
- Conduct weekly (80-minute) supervision sessions to support lab students in the development of foundational therapeutic skills.
- Provide supervision of pre-practicum therapy experience, including weekly review of video-taped therapy sessions and offering both feedback and on-going support based on skill development and therapeutic presence.
- Manage grading of all course assignments, providing feedback regarding grades in a timely and efficient manner, including entering grades into the university grading system, working with students to meet assignment competencies, and providing feedback and training on professional writing skills.
- Participate in weekly TA oversight meetings with the course instructor and TA team to discuss student development and help guide course progress.

Fourth-Year Mentorship, Aug 2020—Present
Supervisor and Clinical Mentor: Rodger Bufford, PhD

- Meet weekly with a second-year graduate level trainee to engage in experiential learning of supervision and management skills.
- Responsible for fostering ongoing professional development of the second-year trainee, including overseeing development of knowledge, skills, and attitudes related to the various tasks of second year, including practicum I training experience.
- Participate in weekly supervision-of-supervision meetings with clinical mentor.

Graduate Student Writing Tutor Sept 2018-June 2020

- Provided weekly one-on-one peer writing support for first year PsyD students during fall, spring, and summer semesters.
- Focused on teaching APA writing guidelines, paper organization and planning, basic grammar and spelling, as well as helping students develop and bolster their professional writing voice.

RESEARCH EXPERIENCE

Dissertation
Dissertation Title: *Awe in the Helping Professions: Approaching Graduate Trainee Well-Being* through *Transcendent Emotion.*

- Committee: Marie-Christine Goodworth, Ph.D. (Dissertation Chair); Mark McMinn, PhD. (Member); Brooke Kuhnhausen, PhD. (Member).
- Proposal Approved: December 04, 2019
- Anticipated Defense: Spring of 2021

Research Vertical Team Member, Aug 2018 - Present
Chair: Marie-Christine Goodworth, PhD

- Bi-weekly small group team meetings focused on obtaining working knowledge of program-wide research competencies, collaborating with peers on research ideas and topics, as well as on-going dissertation development.

Current Research Interests: Physiological impact of trauma, grief, women's health, mind-body integration for holistic healthcare, and the importance of creativity, play, and movement in adult well-being.

6

PROFESSIONAL TRAININGS AND WORKSHOPS

Clinical Team, 2017-Present
Clinical Team Mentors: Roger Bufford, PhD. (2020-2021); Kristie Knows His Gun, PsyD (2019-2020); Brooke Kuhnhausen, PhD (2018-2019); Nancy Thurston, PsyD, ABPP (2017-2018)

- Weekly meetings for professional consultation and discussion of clinical work from a variety of mental health settings.
- Consult with other PsyD students from various years in the program on case conceptualizations and client outcomes.

Clinical Colloquia, Presentations, and Miscellaneous Trainings (2017-2020)
Portland AEDP Institute:

Edlin, J., MFT. **The Therapist as Organizing Other: Regulating and Building Self-Structure in Dysregulated Clients through an AEDP lens.** Conference, Portland AEDP at OMSI, Portland, OR. April 26, 2019.

George Fox Department of Clinical Psychology:

Justin Lee, PhD. ***Pediatric cancer and the psychology of oncology and hematology***. Grand Rounds, Graduate School of Clinical Psychology, George Fox University, Newberg, OR. October 14, 2020.

Amy Stoeber, PhD. ***Mitigating the effects of ACES and transforming primary care through resilience building and compassionate connection***. Grand Rounds, Graduate School of Clinical Psychology, George Fox University, Newberg, OR. February 12, 2020.

Cheryl Forster, PsyD. ***Intercultural prerequisites for effective diversity work.*** Colloquium, Graduate School of Clinical Psychology, George Fox University, Newberg, OR. October 15, 2019.

Everett L. Worthington, Jr., PhD. ***Promoting forgiveness.*** **Colloquium, Graduate School of Clinical Psychology, George Fox University, Newberg, OR**. September 25, 2019.

Douglas Marlow, PhD. ***Marital therapy and the Gottman standard.*** **Grand Rounds, Graduate School of Clinical Psychology**, George Fox University, Newberg, OR. March 20, 2019.

Diomaris Safi, PsyD & Alexander Millkey, PsyD. ***Opportunities in forensic psychology.*** Colloquium, Graduate School of Clinical Psychology, George Fox University, Newberg, OR. February 13, 2019.

Scott Pengelly, PhD. ***Old pain in new brains.*** Grand Rounds, Graduate School of Clinical Psychology, George Fox University, Newberg, OR. October 10, 2018.

Lisa McMinn, PhD & Mark McMinn, PhD. ***Spiritual formation and the life of a psychologist: Looking closer to soul-care***. Colloquium, Graduate School of Clinical Psychology, George Fox University, Newberg, OR. September 26, 2018.

Michael Vogle, PsyD. ***Integration and ekklesia***. Colloquium, Graduate School of Clinical Psychology, George Fox University, Newberg, OR. March 14, 2018.

Carlos Taloyo, PhD. ***The history and application of interpersonal psychotherapy***. Grand Rounds, Graduate School of Clinical Psychology, George Fox University, Newberg, OR. February 14, 2018.

Jeffery Sordahl, PsyD. ***Telehealth.*** Colloquium, Graduate School of Clinical Psychology, George Fox University, Newberg, OR. November 08, 2017.

Eleanor Gil-Kashiwabara, PsyD. ***Community based participatory research and tribal participatory research with Indian American/Alaskan Natives.*** Grand Rounds, Graduate School of Clinical Psychology, George Fox University, Newberg, OR. October 11, 2017.

RELATED TRAININGS AND CERTIFICATES

Projective Assessment Training Seminar, November 2020 (anticipated)
- Graduate School of Clinical Psychology
- George Fox University
- Rorschach interpretation, Figure Drawings, TAT, Rotter Sentence Completion Test, and the Thurston Cradock Test of Shame
- Instructor: Nancy Thurston, PsyD, ABPP

Trauma Treatment in Clinical Practice, May, 2020
- Certificate of Completion
- Graduate School of Clinical Psychology
- George Fox University
- Instructor: Kenneth Logan, PsyD

Counseling on Access to Lethal Means, Aug 2020
- Certificate of Completion
- Suicide Prevention Resource Center at EDC
- Online Certificate Course

Qualified Mental Health Professional, Aug 2019-June 2020
- Marion County, Oregon

Principles of Group Psychotherapy Certificate, June 2019
- Certificate of Completion
- Graduate School of Clinical Psychology
- George Fox University
- Instructor: Michele D. Ribeiro, EdD, CGP, FAGPA

CPR Certification, 2017-Present
- George Fox University

ADDITIONAL RELEVANT EXPERIENCES

Dec 2016-Aug 2017
Cedarville, OH

CEDARVILLE UNIVERSITY
Student Life Services Employee (SLP)
& Information Desk Receptionist

Student Life Services is a branch of Campus Experience at Cedarville University with an aim to recognize the importance of providing

students with a high level of support and a full range of student services and activities for an enriching campus experience.
Employer: Brian Burns, MA

- Responsibilities:
  - Operated as a receptionist for the university information desk, including answering all calls received on the information hotline and directing individuals to the appropriate extension, as well as answering and screening emails.
  - Provided greeting and physical directions to individuals entering the SLP office (at this desk location) and at the entrance to the university student center (at this desk location).
  - Managed university fleet of vans available for student use and kept track of loaning van keys and all relevant paperwork.
  - In the summer months, served as a member of the student life services team in preparation for new students arriving in the fall, including continued reception responsibilities at the SLP front desk, as well as organizing and preparing training materials and participating in "getting started" brainstorming meetings.

Aug 2015- Dec 2015
Cedarville, OH

CEDARVILLE UNIVERSITY
Undergraduate Teaching Assistant, Statistics
Supervisor and Course Instructor: Dr. Di. Wu, Ph.D

- Assisted with an undergraduate level statistics class, including attending all class periods to be available for student questions and to provide hard-copies of weekly assignment feedback in-person.
- Managed grading of all student assignments, provided feedback regarding grades in a timely and efficient manner, and entered all grades into the university grading system.
- Designed and conducted weekly review sessions to offer additional out-of-class support and facilitate discussion of the material with students.

PROFESSIONAL AFFILIATIONS

Oregon Psychoanalytic Institute, 2018-Present
(Graduate Student Affiliate)

American Psychological Association, 2016-Present
(Graduate Student Affiliate)

Psi Kappa Theta, Psychology Honors Society, 2013-2017
(Member)

RELEVANT MEMBERSHIPS & PARTICIPATION

Friends of Freud (FoF), May 2020
- Psychoanalytic Student Reading Group (member)

- Graduate School of Clinical Psychology
- George Fox University, Newberg, OR

REFERENCES

Available upon request. Please email me at aforcelle17@georgefox.edu to request professional, academic, or personal references.