AN EXPLORATION OF STRESS, SUBJECTIVE
WELL-BEING, AND GRATITUDE
AMONG TEACHERS

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By
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CERTIFICATION OF APPROVAL

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ABSTRACT

The purpose of this study was to examine the relationships between stress, well-being, gratitude, and gratitude practices among teachers. Participants for this study were teachers ($N = 242$) who were recruited through Amazon’s Mechanical Turk. Participants answered questions that assessed their stress levels, factors that contribute to their stress, well-being, gratitude, and the frequency at which they practice different forms of gratitude. Results for this study indicate that stress was negatively correlated with gratitude and well-being. Stress was not correlated with gratitude practices. Well-being was positively correlated with gratitude and gratitude practices. Gratitude was positively correlated with the gratitude practice questions. The results indicate that as participants have greater gratitude and well-being levels they are more likely to engage in gratitude practices. Future researchers can study the different aspects of teacher stress, well-being and gratitude. They can also implement gratitude practice interventions to potentially increase participant gratitude and well-being levels.
INTRODUCTION

Many individuals desire to experience happiness and well-being in their lives (Diener, 2000). Positive emotions such as well-being and gratitude are often experienced in conjunction with one another; those who report high levels of well-being often report high levels of gratitude (Ramzan & Rana, 2014). One way in a person can increase his or her well-being levels is by gratitude journaling. Researchers have found that participants who engage in gratitude journaling have been able to increase their well-being levels (Kerr, O’Donovan, & Pepping, 2015). Gratitude journaling also reduces stress levels (Krejtz, Nezlek, Michnicka, Holas, & Rusanowska, 2016), which is important because stress negatively impacts well-being and gratitude levels (Krejtz et al., 2016).

Stress can impact a person on a regular basis and is often brought on by a person’s profession. This thesis examines the relationship between stress, well-being, gratitude, and gratitude practices in teachers, who often report experiencing high levels of stress (Richards, 2012).

Stress

Stress activates the fight or flight response, which is a physiological reaction that occurs in a person’s body when he or she is faced with a threat (Seaward, 2018). When a person sees a threat, such as a lion, his or her body will be pumped with epinephrine and cortisol. He or she will experience a faster heart rate and have an increase in blood pressure. This heightened physical state will help the person determine if he or she should run away from the lion or fight it. Experiencing an
additional burst of physical strength and mental agility occurs within a person’s body to help him or her survive. After the threat is gone a person’s epinephrine and cortisol levels, blood pressure, and heart rate will return back to normal (Seaward, 2018).

This fight or flight response was essential for the survival of people thousands of years ago and is still necessary for the survival of people today. However, as individuals have evolved and adapted over the years, this same response not only happens to individuals as they are faced with physical threats but also with threats that are psychological or emotional in nature (Seaward, 2018). The physiological effects that are brought on by the fight or flight response also occur when a person experiences stress.

People experience stress in life when they feel overwhelmed or pressured by daily hassles or burdens. Their mental and physical ability is hindered when they experience stress (Seaward, 2018). Stress is often coupled with physical ailments and mental fatigue (Seaward, 2018; Tovian et al., 2017). Stress can come from a wide variety of sources, such as work, school, relationships, or finances, and is classified into two different categories: acute and chronic stress.

**Acute and Chronic Stress**

Acute stress can occur in everyday situations. For example, a person finds out that he has a surprise quiz in one of his classes. His heart beats faster and his blood pressure increases. This heightened physiological response is similar to that of the fight or flight response. The test is handed out, and he takes the quiz. Once the quiz
is over and he turns it in, this heightened physical response goes back to normal and he is able to relax. He just experienced acute stress. When a person experiences acute stress he or she will feel the physiological effects with great intensity anywhere from minutes to hours (Seaward, 2018).

Those who experience chronic stress have the same physiological response as someone who experiences acute stress. However, chronic stress is experienced at a lower level of intensity and lasts for longer periods of time; days, weeks, months, or even years (Seaward, 2018). Chronic stress can be brought on by work pressures or negative life circumstances. Individuals who experience chronic stress often feel overwhelmed, or unable to manage their daily life tasks. Individuals who experience work-related chronic stress often feel overwhelmed by their job, and subsequently their ability to perform well at work is hindered. The fight or flight response is activated frequently by people who experience chronic stress. This frequent activation can negatively impact a person’s health (Denovan & Macaskill, 2017; Lazarus & Folkman, 1984). This response can wear down the body, causing other health-related issues (Tovian et al., 2017).

**Stress and Health**

Acute and chronic stress can take a toll on a person’s body. People who report high levels of either acute or chronic stress report more health problems when compared to individuals who report low levels of stress (Coiro, Bettis, & Compas, 2017; Kang & Sandhu, 2012). For some individuals, when they experience chronic stress they tense their muscles, which can lead to tension related headaches (Kang &
Sandhu, 2012; Tovian et al., 2017). Stress can also impact a person’s breathing. For some, when they experience acute stress their airway becomes restricted or they start breathing rapidly, which can lead to panic attacks (Tovian et al., 2017). The experience of either acute and/or chronic stress has been connected to upper respiratory infections (Cohen & Williamson, 1991), and a greater susceptibility to the common cold (Cohen, Tyrrell, & Smith, 1993). Stress can play a contributing factor to the start or continuation of a multitude of diseases, including cancer and cardiovascular disease (Baum & Polsusnzy, 1999).

**Negative Effects of Stress**

Stress can negatively impact a person’s body as well as other aspects of a person’s life. Stress can negatively impact a person’s intimate relationships (Bahun & Huić, 2017) and mental well-being. Compared to individuals who have low levels of stress, those who have high levels of stress report higher instances of mental disorders, including depression (Leppink, Odlaug, Lust, Christenson, & Grant, 2016; Shen et al., 2014). As individuals experience stress they subsequently experience more negative emotions and fewer positive emotions (Denovan & Macaskill, 2017). This could potentially be a contributing factor as to why individuals high in stress are more likely to have a negative outlook on their life (Leppink et al., 2016), and are less satisfied with their lives (Denovan & Macaskill, 2017). Stress is felt by individuals in all sorts of occupations. Teachers in particular, are susceptible to stress.
**Teacher Stress**

Teachers experience work-related stress whether they teach at an elementary school, high school, or even at the college level (Richards, 2012). In a survey of more than 4,000 teachers and staff, 61% of those surveyed indicated that their work was either “always” or “often” stressful (Bass, 2017). As teachers experience stress it can negatively impact their health and personal relationships (Shernoff, Mehta, Atkins, Torf, & Spencer, 2011). Among college teachers, increased work-related stress is associated with poorer mental health (Govind, Ratchagar, & Ruby Violet Rani, 2014). In a study of over 1,000 university professors in China, over half reported scores that were high enough on a depression scale to categorize them as depressed (Shen et al., 2014). These depression scores were associated with job related stress (Shen et al., 2014). A teacher’s satisfaction with his or her job (Collie, Shapka, & Perry, 2012; Klassen & Chiu, 2010) and school site (Arens & Morin, 2016), can be negatively impacted by stress.

Teacher stress can come from a variety of different stressors. Stressors can include having low wages (Paduraru, 2014), a heavy workload, preparing for classroom lessons, and managing students’ behaviors (Collie et al., 2012). Teachers who have a lack of resources, or who work at school sites with disorganization also have reported experiencing stress (Shernoff et al., 2011). Stress can also be associated to the time of day in which a teacher works. Specifically, among college professors, those who work early in the morning or late in the evening often experience stress (Cladellas & Castello, 2011). Teachers also feel pressure to help
their students succeed academically by receiving good grades and earning high scores on standardized tests (Arens & Morin, 2016). Experiencing stress has been correlated with burnout (Russell, Altmaier, & Van Velzen, 1987) and emotional exhaustion among teachers (Schabracq, Winnubst, & Cooper, 2003).

**Emotional Exhaustion of Teachers**

Emotional exhaustion is experienced by individuals who have depleted their emotional energy due to the demands that are placed on them (Schabracq et al., 2003). One aspect that leads to emotional exhaustion among professors is when they have students who behave in rude or inappropriate ways in the classroom, such as threatening to file a complaint against them (Jiang, Tripp, & Hong, 2017). This can contribute to teachers experiencing stress and burnout (Jiang et al., 2017). The more classes a teacher teaches in a day is another contributing factor to a teacher experiencing emotional exhaustion (Schmidt, Klusmann, Lüdtke, Möller, & Kunter, 2017).

As teachers feel drained emotionally they are no longer as effective when it comes to their teaching (Arens & Morin, 2016), which ultimately impacts their students. Students' academic achievement is lower on average, particularly regarding academic testing, in classrooms with teachers who report being emotionally exhausted (Arens & Morin, 2016). Students do not feel the support and help they need from their teacher. This lack of support may contribute to why these students have lower grades (Arens & Morin, 2016). Experiencing emotional exhaustion and stress can potentially impact a teacher’s well-being levels. Among a sample of
Chinese college professors, researchers found that well-being levels were lower on average for college professors when compared to the general Chinese population (Ge et al., 2011). Skaalvik and Skaalvik (2011) found that job satisfaction and emotional exhaustion were contributing factors to Norwegian elementary and middle school teachers desire to leave the profession.

**Teacher Attrition and Migration**

Teacher attrition and migration are common concerns for many school districts. Teacher attrition refers to teachers who leave the profession for an alternative career. Whereas, teacher migration refers to teachers who switch to a different school district, school site, or to a different grade level, all while staying within the profession. For individuals who are beginning their careers as public school teachers, 30% leave the profession within the first five years (Darling-Hammond, 2010). Teacher attrition rates can be as high as 49% for uncertified teachers (Darling-Hammond, 2010; Henke, Chen, Geis, & Knepper, 2000). Individuals who have a teaching certificate leave the profession at a rate of 14%, which is markedly lower than rate for teachers who are uncertified (Henke et al., 2000). Another contributing factor to teacher attrition is when new teachers switch from one grade level to a different grade level within the first two years of their teaching career (Ost & Schiman, 2015). Teachers who stay with the same grade level during those first two years are more likely to stay within the profession (Ost & Schiman, 2015). The number of minority students at a school site can also contribute to teacher attrition and migration. Schools that have a high minority population tend
to lose teachers and see their teachers change school districts or grade levels faster than schools with a lower minority population (Steele, Pepper, Springer, & Lockwood, 2015). Another factor that leads to both teacher stress, attrition, and migration is when a teacher’s tenure and evaluations are based on their students’ test scores (Ryan et al., 2017). Teachers are in particular need to have increased well-being due to the work and life pressures that they face on a regular basis.

**Positive Psychology**

Historically, psychology researchers have focused on studying and subsequently working to correct people’s problems. Positive psychology is a subfield of psychology created in 1998 by Martin Seligman (Seligman & Csikszentmihalyi, 2000). Instead of focusing on fixing people and understanding why people act in a negative or cruel way, positive psychologists focus on what makes people flourish and thrive in life (Seligman & Csikszentmihalyi, 2000). Positive psychologists also want to discover how people find meaning and purpose in the lives they lead. Researchers in the field of positive psychology study a variety of topics including goal attainment, human strengths, flow, and positive emotions. Positive human traits such as contentment, happiness, courage, forgiveness, wisdom, and well-being are also studied to look at how each of these traits shape individuals. Individuals who experience higher levels of these positive traits such as well-being, tend to live fulfilling and productive lives (Seligman & Csikszentmihalyi, 2000).
Subjective Well-Being

One aspect of a person’s life that positive psychologists are interested in studying is a person’s well-being. Someone who has a high level of subjective well-being would experience positive emotions regularly and feel satisfied with his or her life (Harrington, 2013). Well-being is often equated with happiness and is appraised differently by each individual (Diener & Scollon, 2014). The more happy and positive a person feels about his or her life the greater the well-being he or she will experience. Individuals who report having more positive events in their everyday lives also report having higher levels of well-being compared to those who report fewer positive daily life events (Nezlek, Rusanowska, Holas, & Krejtz, 2017).

Individuals who have a negative outlook on their lives and feel negative emotions on a frequent basis would be considered to have low levels of well-being.

People often desire to experience greater well-being and happiness in their lives. Diener (2000) surveyed college students from 42 different countries and had them rate how important they felt money, life satisfaction, and happiness were in their lives. On average, people from around the world rated happiness and life satisfaction higher in importance than acquiring money (Diener, 2000). Diener and Chan (2011), examined multiple studies and found individuals who have good health and live long lives also have high levels of well-being.

Researchers have been interested in studying if the length of a person’s life is connected to his or her well-being. Researchers looked at sets of twins in Denmark and found a connection between well-being and longevity (Sadler, Miller,
Christensen, & McGue, 2011). After controlling for genetic and environmental factors they found individuals with high levels of subjective well-being live longer lives than those with lower levels of well-being (Sadler et al., 2011).

Lawrence, Rogers, and Wadsworth (2015) assessed individuals who participated in the General Social Survey (GSS), which was administered 18 times to the same individuals from 1978 to 2002. This survey assessed participant income, opinions, and attitudes, among other things. Researchers compared the GSS with the 2008 National Death Index (Lawrence et al., 2015). One item that was part of the GSS asked participants to choose if they were currently “very happy,” “pretty happy,” or “not too happy” (Lawrence et al., 2015). As researchers analyzed the Death Index in comparison to the GSS, individuals who rated themselves as “not too happy” were 14% more likely to die when compared with individuals who rated themselves as “very happy” (Lawrence et al., 2015). Therefore, individuals who rated themselves “very happy” were more likely to live longer lives.

A person’s longevity can be positively impacted by having a positive outlook on his or her future (Danner, Snowdon, & Friesen, 2001). Researchers examined autobiographies that were written by a group of nuns while they were in their 20’s (Danner et al., 2001). Researchers took note of how often they used positive emotions in their writing. The nuns who had expressed higher levels of positive emotion at a young age lived longer when compared to other nuns who wrote more neutral or negative statements about their future (Danner et al., 2001). Not only is expressing positivity about one’s future connected to longevity, but also writing
positively about one’s past has been connected to longevity (Pressman & Cohen, 2012). Pressman and Cohen (2012) gathered autobiographies of deceased psychologists and analyzed how often they used positive language in their writing. Psychologists who used positive words as they wrote about their life tended to live three to six years longer than psychologists who did not use similar positive language (Pressman & Cohen, 2012). Experiencing high levels of well-being can positively impact a person’s life. Individuals who have reported high levels of well-being often experience less stress and live longer lives than those with low well-being levels.

Another positive emotion that has have been connected to well-being is gratitude.

**Gratitude**

Individuals who rate themselves high in well-being also tend to rate themselves high in gratitude (McCullough, Emmons, & Tsang, 2002; Wood, Joseph, & Maltby, 2009). Gratitude is defined as a feeling or emotion of thankfulness a person has for the people, benefits, and/or circumstances he or she experiences in life. The experience of gratitude is different from person to person.

Many people think it is important to express gratitude to others. There are many daily situations in which it is appropriate to show one’s gratitude toward another. For example, people are often expected to say “thank you” when they receive a gift or when a door is held open for them. Also, when one person sneezes and another says “bless you,” it is common courtesy for the person who sneezed to say “thank you” in return. If a person does not respond appropriately with a “thank
you” in these circumstances, his or her lack of gratitude is often frowned upon and considered rude by others (Emmons & Crumpler, 2000).

Gratitude is not only exhibited person to person, but it is often expressed to a higher power, such as God or the universe, and is often tied to religion (McCullough et al., 2002). There are many religions including Christianity, Judaism, and Islam, whose members practice various forms of gratitude (Emmons & Crumpler, 2000). These individuals incorporate forms of prayer or praise into their daily lives where they give thanks to God for all the blessings they have received (Emmons & Crumpler, 2000). Gratitude is often expressed to another individual or higher being, but that is not always the case. For example, people can be grateful for their healthy body, catching themselves before they fall, or even being grateful for flowers growing in their garden (Emmons & Crumpler, 2000).

Being grateful and showing appreciation to others is often tied to other positive attributes. Gratitude has been shown to correlate with positive attributes such as agreeableness, conscientiousness, openness, and extroversion (McCullough et al., 2002; Wood et al., 2009). Gratitude has also been correlated with self-esteem (Krejtz et al., 2016), higher levels of social support (Lin, 2015), and meaningful engagement in life (Hwang, Kang, Tak, & Lee, 2015). Individuals who rate themselves higher in gratitude also experience greater levels of well-being, and more positive emotions, when compared to their less grateful counterparts (McCullough et al., 2002; Wood et al., 2009).
Practicing Gratitude

Researchers are interested in studying gratitude to see how it can impact a person’s life. Gratitude is typically studied in one of two ways. Researchers tend to analyze a person’s gratitude by asking participants to report how grateful they are for the people and experiences that occur in their lives. Gratitude can also be studied by encouraging participants to take part in a gratitude practice. A gratitude practice is where an individual expresses his or her thankfulness, to others or to a higher power, for the benefits he or she has received. Some researchers have participants keep a gratitude journal where they write down 3 to 5 things they are grateful for a few times a week. Other researchers study gratitude by encouraging their participants to write letters expressing the gratitude they feel for their family and friends. Researchers have found that as participants have made a conscious effort to practice gratitude, participants have been able to increase their well-being (Emmons & McCullough, 2003; Kerr, O’Donovan, & Pepping, 2015; Toepfer, Cichy, & Peters, 2012). Gratitude journaling, in particular, has been shown to decrease participant stress levels (Killen & Macaskill, 2015) diastolic blood pressure (Jackowska, Brown, Ronaldson, & Steptoe, 2016) and emotional distress (Jackowska et al., 2016). In sum, practicing gratitude can increase well-being and reduce the negative mental and physical aspects of a person’s life.

Gratitude, Stress, and Well-Being among Teachers

Teachers often experience stress, which negatively impacts their mental and physical health (Richards, 2012; Shernoff et al., 2011). Teachers who experience
stress subsequently have lower levels of well-being. Some experience emotional exhaustion, which impacts their job satisfaction and the ability to effectively teach their students (Collie et al., 2012). This study examined how the aspects of stress, gratitude, and well-being correlate with one another among teachers. This study also examined how practicing gratitude impacts a person’s stress, gratitude, and well-being levels.

**Current Study**

The relationships between gratitude, well-being, and stress were examined. Participants were teachers who claimed to teach in one or more of the following settings: preschool, k-12, home school, vocational school, community college, 4-year college, graduate, or doctorate school. Teachers, in particular, could benefit from having a reduction of their stress levels and increased levels of well-being and gratitude. Participants were asked if they currently engage in gratitude practices. These gratitude practices scores were compared with their gratitude, well-being, and stress levels.

**Hypotheses**

**Hypothesis I: Gratitude Will be Negatively Correlated With Stress**

Individuals who are more grateful could potentially have lower levels of stress. Experiencing a positive emotion, such as gratitude, at a high level could potentially counteract experiencing stress (O’Leary & Dockray, 2015). Previous studies have found that participants who rate themselves higher on a gratitude scale have lower levels of stress (Killen & Macaskill, 2015; O’Leary & Dockray, 2015).
Hypothesis II: Gratitude Will be Positively Correlated With Well-Being

The connection between gratitude and well-being can help explain that positive emotions coincide with one another (Fredrickson, 1998). Previous studies have found that participants who rate themselves higher on a gratitude scale have higher levels of well-being (Emmons & McCullough, 2003; Krejtz et al., 2016; Wood et al., 2009).

Hypothesis III: Stress Will be Negatively Correlated With Well-Being

As individuals experience low levels of stress they tend to experience less physical and mental health problems, and therefore have greater levels of well-being (Seaward, 2018). Previous studies have found that participants who rate themselves higher on a stress scale have lower levels of well-being (Krejtz et al., 2016).

Hypothesis IV: The Practice of Gratitude Will be Positively Correlated With Well-Being

Individuals who practice gratitude more often can potentially experience greater levels of well-being. Therefore, as an individual incorporates gratitude practices into their everyday life, he or she has an increased potential to feel more positive about his or her life and to experience greater well-being (Kerr et al., 2015). Previous studies have found that participants who rate themselves higher on a gratitude practice scale have higher levels of well-being (Kerr et al., 2015; Kaplan et al., 2014; Ramírez, Ortega, Chamorro, & Colmenero, 2014; Toepfer et al., 2012).
Hypothesis V: The Practice of Gratitude Will be Negatively Correlated With Stress

Individuals who practice gratitude more often can potentially experience less stress (Killen & Macaskill, 2015). Therefore, as an individual incorporates gratitude practices into their everyday life the less negative effects of stress that person will experience. Previous studies have found that participants who rate themselves higher on a gratitude practice scale have lower levels of stress (Killen & Macaskill, 2015).
METHOD

Participants

Participants for this study were recruited through Amazon’s Mechanical Turk online. Five hundred and eighty participants were surveyed and 338 participants were excluded from the study. One hundred participants were excluded because they had fill-in responses that did not make sense or were unrelated to the prompts. For example, responses to the prompt: “describe a time, if you had one, when you expressed gratitude and it was a negative experience for you” with “help to the my student he is miss understanding so i punished,” and “they are not study to well at moment.” Ninety participants were excluded from the study because their location was not within the United States. Sixty-three participants did not complete the entirety of the study and 25 participants were too young or did not agree to the consent form. Eighteen participants copy and pasted their fill-in responses from the internet. Thirteen participants had the exact same GPS coordinates for a park located in New York and were excluded. Twelve participants were also excluded because all of these participants had the same GPS coordinates for a lake in Kansas. Eleven participants had a short response time of less than two minutes and were excluded. Six were excluded because the participants marked the same response all the way through the survey.

After exclusions, there were 242 participants remaining for the data analysis of this study. Participants were individuals who claimed to resided within the United States and claimed to currently be teaching at the time of the survey. Of the 242
participants, 115 were adult men, 125 were adult women, one participant listed their gender as other, and one declined to state their gender. Participants were between the ages of 21 and 66 (M = 34.08, SD = 8.99). The majority of the participants, 76.4%, listed their race as White. The majority of participants listed that their highest completed level of education for was 4-year college (47.5%). The majority of participants teach full-time (80.6%) and teach their students face to face (86.8%). Participants reported they had been teaching from 1 to 40 years (M = 8.11, SD = 6.87). Further demographic information is listed in Appendix A. Each participant was paid $0.50 for participating in the study.

Materials

Consent Form

Participants were given a consent form (Appendix B) that informed them about the study. They were informed that they could drop out of the study at any time. Participants were also informed that their information would be kept confidential and private.

Perceived Stress Scale (PSS)

Stress was assessed with the Perceived Stress Scale (PSS; Appendix C), which was created by Cohen, Kamarck, and Mermelstein (1983). This 10-item questionnaire assessed stress in participants over the past month. Questionnaire answers were on a Likert scale from 0 (never) to 4 (very often). Items 4, 5, 7, and 8, were reverse scored. Scores were averaged and range from 0 to 4. Scores from 0 to 1.3 show low stress, and scores from 2.7 to 4.0 show high stress. Strong internal
consistency was found for the PSS ($\alpha = .94$; Killen & Macaskill, 2015). Strong internal consistency was also found for the present study ($\alpha = .88$). Convergent and predictive validity was also found for the PSS (Cohen et al., 1983).

**Stress Factors Scale (SFS)**

The Stress Factors Scale (SFS; Appendix D) includes items from the Teacher Stress Questionnaire, which was created by Kyriacou and Chien (2004). Kyriacou and Chien (2004) used this scale to assess stress among Taiwanese teachers and translated this questionnaire into English. Strong internal consistency was found in this study ($\alpha = .93$). The questionnaire has 64 items assessing teacher stress, coping strategies, and school or government intervention strategies. Of the 64 items, 19 assess teacher stress and were used in this study to assess stress related factors to being a teacher. For this study, the wording on some of the items was changed to make them more easily interpreted by the participants. In addition, five items were added to assess factors that also could contribute to a participants’ stress levels: preparing for lessons, finances, immediate personal relationships, physical health, and overall stress of being a teacher. Participants rated the amount each item contributed to their stress from 1 (not at all stressful) to 5 (very stressful). Scores were averaged and range from 1 to 5.

**Satisfaction With Life Scale (SWLS)**

Participant well-being was assessed with the Satisfaction with Life Scale (SWLS; Appendix E), which was created by Diener, Emmons, Larsen, and Griffin (1985). The scale has 5 items and answers were on a Likert scale from 1 (strongly
disagree) to 7 (strongly agree). Scores for the 5 items were averaged and range from 1 to 7. Total scores from 1 to 1.8 show extreme dissatisfaction with life, and scores ranging from 6.2 to 7 show extreme satisfaction with life. High internal consistency was found for the SWLS in previous research ($\alpha = .96$; Killen & Macaskill, 2015) and in this study ($\alpha = .89$). Discriminant validity was found between the SWLS and the Life Orientation Test, which assesses optimism (Lucas, Diener, & Suh, 1996) and between the SWLS and Rosenberg’s Self-Esteem Scale, which measures self-esteem (Lucas et al., 1996).

**Gratitude Questionnaire (GQ-6)**

The Gratitude Questionnaire (GQ-6; Appendix F) assesses gratitude and was designed by McCullough, Emmons, and Tsang (2002). The questionnaire has 6 items, and answers range from 1 (strongly disagree) to 5 (strongly agree). Items 3 and 6 are reverse scored. Scores were averaged and range from 1 to 5. Total scores that range from 1 to 1.8 show low gratitude and scores of 4.2 to 5 show high gratitude (McCullough et al., 2002). The GQ-6 correlated with a three-item gratitude scale ($r = .65$; McCullough et al., 2002). The Gratitude Questionnaire has strong internal consistency in previous research ($\alpha = .87$; Killen & Macaskill, 2015) and in this study ($\alpha = .82$).

**Gratitude Practice Questions (GPQ)**

Additional questions (Appendix G), created specifically for this study, were given to participants to assess their gratitude related practices. Ten questions were compiled to assess if participants show gratitude to their students and others.
Participants reported if they show gratitude to their students by the following: greeting them, saying positive or encouraging phrases to their students, engaging them in conversation, and thanking their students (Howells, 2014). Participants were also asked if they practice gratitude in the following ways: gratitude journaling, writing thank you cards to others, expressing gratitude to another person through face-to-face interaction, and through prayer. Participants were asked if they currently use a gratitude app, and if so, to describe the app they use. Participants rated these questions by the frequency with which they participate in these gratitude practices from 1 (never or almost never) to 5 (daily or almost every day). Scores were averaged using an interval level even though the scoring is at the ordinal level. Total scores range from 1 to 5, where 1 to 1.8 show low frequency rates of gratitude practice and scores of 4.2 to 5 show high frequency rates of gratitude practice among participants. Low internal consistency was found in this study ($\alpha = .64$). Participants were able to list additional gratitude practices that they use that were not mentioned in this questionnaire. Participants were also asked to share if they had a positive and a negative experience expressing gratitude.

**Demographic Questionnaire**

Participants were given a demographic questionnaire (Appendix H). They reported their age, sex, ethnicity, and highest completed level of education. Participants also reported the different settings in which they teach and whether they teach face to face, online, and/or hybrid. Participants were asked to classify how they teach: full time, part time, adjunct, if they are a substitute teacher or a homeschool
teacher. Participants reported how long they had been teaching and they were able to include a personal comment about the study.

**Debriefing Form**

Participants were given a debriefing form (Appendix I). They were informed of previous research study results that were expected from this study. They were given the contact information for both this researcher and the thesis advisor. Participants were given links to articles that relate to this study to gain further knowledge about their participation.

**Design**

A non-experimental correlational design was used for this study. Correlations between each scale were calculated. Hypothesis I, which examines the relationship between gratitude and stress, was tested by calculating the correlation between the Gratitude Questionnaire (GQ-6) and Perceived Stress Scale (PSS). Hypothesis II, which examines the relationship between gratitude and well-being, was tested by calculating the correlation between the GQ-6 and the Satisfaction with Life Scale (SWLS). Hypothesis III, which examines the relationship between stress and well-being, was tested by calculating the correlation between the PSS and SWLS. Hypothesis IV, which examines the relationship between practicing gratitude and well-being, was tested by calculating the correlation between the gratitude practice questions (GPQ) and the SWLS. Hypothesis V, which examines the relationship between practicing gratitude and stress, was tested by calculating the correlation
between the GPQ and the PSS. Exploratory analyses were conducted for the factors that contribute to stress among participants.

**Procedure**

Participants were recruited via Amazon’s Mechanical Turk (MTurk) to participate in the study. Participants were asked if they are a teacher and currently teaching; a response of “yes” allowed them to participate in the study. Participants were given a consent form and by choosing “I Agree” they were able to participate in the study. The questionnaires were given to participants in three blocks, presented in a random order. The first block included a questionnaire that assessed participants’ perceived stress and another scale that assessed factors that contribute to their stress. The second block included a questionnaire that assessed participants’ well-being. The third block included gratitude related items. Participants’ gratitude levels were assessed, as well as the frequency at which they practice varying forms of gratitude. They were also able to describe a positive and negative experience they had expressing gratitude. The order of items within each instrument was randomized. After completing all three blocks, participants were asked to fill out the demographics questionnaire. Participants were able to skip any question they did not want to answer. At the end of the survey participants were shown the debriefing form. Participants received $0.50 for their participation in the study.
RESULTS

Hypothesis I, which stated that gratitude will be negatively correlated with stress, was supported by the significant correlation between GQ-6 and PSS scores, \( r(242) = -.55, p < .001 \). As participants’ level of gratitude increased their level of stress decreased (Table 1).

Table 1

Correlations Among Questionnaire Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stress</td>
<td></td>
<td></td>
<td></td>
<td>1.66</td>
<td>0.71</td>
</tr>
<tr>
<td>2. Well-being</td>
<td>-.55**</td>
<td></td>
<td></td>
<td>3.65</td>
<td>0.91</td>
</tr>
<tr>
<td>3. Gratitude</td>
<td>-.55**</td>
<td>.41**</td>
<td></td>
<td>3.95</td>
<td>0.75</td>
</tr>
<tr>
<td>4. Gratitude Practice</td>
<td>-.07</td>
<td>.30**</td>
<td>.22**</td>
<td>3.27</td>
<td>0.57</td>
</tr>
</tbody>
</table>

** Correlation is significant at the .01 level (2-tailed).

Hypothesis II, which stated that gratitude will be positively correlated with well-being, was supported by the significant correlation between GQ-6 and SWLS scores, \( r(242) = .41, p < .001 \). As participants rated themselves high in their level of gratitude they also rated themselves high in their level of well-being (Table 1).

Hypothesis III, which stated that stress will be negatively correlated with well-being, was supported by the significant correlation between the PSS and SWLS scores, \( r(242) = -.55, p < .001 \). As participants’ level of stress increased their level of well-being decreased (Table 1).
Hypothesis IV, which stated that the frequency at which participants practice gratitude will be positively correlated with well-being, was supported by the significant correlation between the GPQ and SWLS scores, \( r(242) = .30, p < .001 \). As the frequency at which participants practiced gratitude increased, their levels of well-being increased (Table 1).

Hypothesis V, which stated that the frequency at which participants practice gratitude will be negatively correlated with stress, was not supported by the correlation between GPQ and PSS scores. The correlation between the GPQ and PSS was essentially zero, \( r(242) = -.07, p = .272 \) (Table 1). Correlations between PSS and each of the GPQ items is shown in Table 2. Many of these scores are significant and support the hypothesis.

An additional correlation was conducted to examine the correlation between gratitude and the frequency at which participants practice gratitude. This found a significant positive correlation between the GQ-6 and GPQ, \( r(242) = .22, p = .001 \). As the frequency at which participants practiced gratitude increased, their level of gratitude increased (Table 1). A visual depiction of the significant relationships is shown in Figure 1.

An exploratory analysis was conducted for the factors that contribute to stress among participants. Responses on the Stress Factors Scale were averaged and ordered from most stressful to least stressful. The item reported by participants that contributed the most to their stress was “student’s misbehavior” \( (M = 3.40; \text{Appendix J}) \). The item reported by participants that contributed the least to their stress
Table 2

*Correlations Between PSS and Gratitude Practice Questions Items*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greet students as they enter the classroom</td>
<td>-.23**</td>
</tr>
<tr>
<td>Say positive or encouraging phrases</td>
<td>-.25**</td>
</tr>
<tr>
<td>Engage in conversation to students</td>
<td>-.29**</td>
</tr>
<tr>
<td>Thank your students</td>
<td>-.14*</td>
</tr>
<tr>
<td>Give gifts to colleagues</td>
<td>.11</td>
</tr>
<tr>
<td>Gratitude journaling</td>
<td>.13*</td>
</tr>
<tr>
<td>Write thank you cards or letters</td>
<td>.10</td>
</tr>
<tr>
<td>Express gratitude in person or phone call</td>
<td>-.10</td>
</tr>
<tr>
<td>Pray to God or universe</td>
<td>-.01</td>
</tr>
<tr>
<td>Use a gratitude app</td>
<td>.20**</td>
</tr>
</tbody>
</table>

** Correlation is significant at the .01 level (2-tailed).
* Correlation is significant at the .05 level (2-tailed).

was “competition between classes/colleagues” ($M = 2.26$; Appendix J). A few participants indicated that their commute was an additional item not listed in the questionnaire that added to their stress levels.

Another exploratory analysis assessed the frequency at which participants practiced gratitude. The gratitude practice that participants engaged in most frequently was to “greet their students” ($M = 4.33$; Appendix K). The gratitude
Figure 1. Variable relationships. This figure illustrates the significant relationships between variables with a double ended arrow.

Practice that participants engaged in with the least frequency was “using a gratitude app” ($M = 1.84$; Appendix K). Participants listed additional ways in which they practice gratitude. The most frequently mentioned practices that were not listed in the questionnaire were mindfulness practices, including yoga and meditation.

Additional correlations were conducted between age, years teaching, and all of the questionnaire scores (Appendix L). Age was significantly correlated with PSS $r(242) = -.16, p = .010$, and GQ-6, $r(242) = .19, p = .004$. Age was also correlated with years teaching, $r(242) = .83, p < .001$. Years teaching and GQ-6 were significantly correlated $r(242) = .15, p = .021$. Based on these correlations as a person’s age increases they have lower levels of stress, and higher levels of gratitude. Therefore, a person’s age may be more important than years teaching when it comes to stress and gratitude. The remaining correlations were low and not statistically significant.
DISCUSSION

The purpose of this study was to examine the relationships between stress, well-being, and gratitude among teachers. Hypothesis I was confirmed in this study; teachers who rated themselves higher in gratitude also rated themselves lower in stress. Hypothesis II was confirmed in this study; as teachers rated themselves higher in gratitude they also rated themselves higher in well-being. Hypothesis III was confirmed in this study; teachers who rated themselves higher in stress also rated themselves lower in well-being. Hypothesis IV was confirmed in this study; teachers who practiced gratitude at a higher frequency also rated themselves higher in well-being. Hypothesis V was not confirmed in this study. There was no connection between the frequency at which teachers practice gratitude and their stress levels.

For this study, gratitude and gratitude practices are defined and assessed differently and therefore have differing results. Gratitude is defined as a feeling or emotion of thankfulness a person has for the people, benefits and/or circumstances he or she experiences in life. Experiencing the emotion of gratitude, although often paired with an action such as saying “thank you,” does not always occur. A person can feel grateful for another person but that does not mean that he or she will act on that emotion. A person can also experience gratitude that is not tied to another person such as being grateful for one’s health or grateful for the flowers growing in his or her garden.

Gratitude practices are defined as actions that an individual takes to express his or her gratitude for another person or to God. Such acts include writing a thank
you card, giving gifts to colleagues, or expressing gratitude face to face. Even the act of writing down a list of things a person is grateful for is also considered a gratitude practice.

Some of the correlations between stress and the gratitude practice questions are negatively correlated. However, some of these practices that are negatively correlated including greeting students, engaging in conversation with students, and saying positive or encouraging phrases to students may not demonstrate gratitude. It is possible that many teachers may greet their students, or converse with them but it does not mean that the teacher feels grateful for their students and expresses that gratitude to their students. There is also a significant correlation between stress and using a gratitude app. A potential explanation is that individuals who experience high levels of stress may be using a gratitude app in a way to reduce their stress.

For this study, the frequency at which a person practices gratitude did not impact a person’s stress levels. Researchers have reported mixed results when they have conducted studies examining stress and gratitude practices. Krejtz et al. (2016) found that as individuals participated in a gratitude journaling practice when compared to a control group, were able to reduce their stress levels. However, a study conducted by Flinchbaugh, Moore, Chang, and May (2012), in which their participants, who were college students, learned stress reduction techniques and wrote in a gratitude journal, found no reduction in stress levels when compared to a control group. Over the course of the study participants actually experienced an increase in their stress levels (Flinchbaugh et al., 2012). A potential explanation for the increase
in their stress levels is because the post test was given to participants at the end of the semester, which is often a stressful time for many students (Flinchbaugh et al., 2012). These two studies are on opposite ends of the spectrum when it comes to stress reduction and gratitude practices. The results for the present study of teachers, where no connection between stress and gratitude practices was found, falls right in the middle of the spectrum. Based on these results and the study conducted by Flinchbaugh et al. (2012), practicing gratitude is not tied to low levels of stress. However, as people experiences high levels of positive emotions, such as well-being and gratitude, they also report experiencing low levels of stress.

As confirmed in this study, individuals who have high levels of well-being have lower levels of stress (Denovan & Macaskill, 2017; Krejtz et al., 2016). Individuals who report high levels of gratitude also report low levels of stress (Wood, Maltby, Gillett, Linley, & Joseph, 2008). Chan (2010) found that, as a sample of Chinese school teachers reported high gratitude levels, they also reported low levels of emotional exhaustion. Emotional exhaustion is experienced by individuals who have depleted their emotional energy due to demands or hassles in their lives. Emotional exhaustion can lead individuals to experience stress (Schabracq et al., 2003). Therefore, as a person experiences high levels of positive emotions such as well-being and gratitude they will also experience lower levels of stress. The results of this study help to support Fredrickson’s (1998) broaden-and-build theory of positive emotions. In this theory, as people experience more and more positive
emotions, they will subsequently experience less negative emotions (Fredrickson & Joiner, 2002).

The broaden-and-build theory of positive emotions also helps to explain the results in this study, in which participants who reported high levels of gratitude also reported high levels of well-being. Past researchers have also found similar results (Chan, 2013; Krejtz et al., 2016; Ramzan & Rana, 2014). The more often a person feels gratitude and well-being the more likely they will feel these emotions and other positive emotions in the future (Fredrickson & Joiner, 2002). As positive emotions increase in frequency, a person’s life becomes more enjoyable and fulfilling (Fredrickson, 1998).

Based on the results of this study, as participants rated themselves high in both gratitude and well-being they also participated in gratitude practices at a greater frequency. A study by Krejtz et al. (2016) found that as individuals practice gratitude they experience more feelings of gratefulness and their well-being also increases. A possible explanation for this connection was found by Kaczmarek et al. (2014) in which their participants who rated themselves high in gratitude were more likely to complete a gratitude intervention when compared with their less grateful counterparts. Those high in gratitude were more likely to complete the intervention because they expected the intervention to have a positive impact on their lives (Kaczmarek et al., 2014). Individuals who possess high gratitude may be more willing to exhibit behaviors that would continue to enhance their already present gratitude.
Limitations

A possible limitation for this study is the validity of participant responses because individuals were recruited through Amazon Mechanical Turk. However, this is unlikely because the validities found in this study are comparable to those reported in the literature. There is also no guarantee that these participants are actually teachers. Another limitation is the generalizability of the results to individuals that work in different professions other than teaching as teachers were the only participants for this study. A majority of the participants listed their race as Caucasian therefore limiting the generalizability to the otherwise diverse American population. Another limitation is due to the fact that this study was only administered once, it does not help to show how teachers’ stress, gratitude, and well-being levels can change over the course of a semester or the school year.

A possible limitation is that many participants were excluded from the study. However, these exclusions did not appear to markedly bias the results, as most of the significant correlations remained significant even after including all of the responses (Appendix N).

Future Research

The results of this study help to pinpoint certain aspects of teaching that bring about the most stress for teachers. The top two most stressful items for teachers are student’s misbehavior and personal finances. Future researchers can study how student’s behavior impacts a teacher and ways in which teachers can better manage their student’s behaviors. Researchers can also look at the relationship between stress
and teacher’s salaries. They can see if teachers who earn a high salary will experience less stress when compared to teachers that are paid a smaller amount.

The results of this study add further evidence that stress can negatively impact a person’s well-being and gratitude levels. Even though practicing gratitude may not help reduce stress levels, practicing gratitude could potentially increase a person’s well-being and gratitude levels. Teachers can practice gratitude in their everyday lives as well as in the classroom to potentially experience an increase in these positive emotions. Researchers can study teacher related gratitude practices and implement them in the classroom. Researchers can also study the teacher-student relationship as gratitude is expressed between students and teachers within the classroom.

**Conclusions**

This study adds to the literature about teachers that work within the United States. Teachers who participated in this study have taught in a variety of school settings from preschool through graduate school. The results of this study can be useful for individuals who are starting their career as a teacher, teachers who are currently teaching, administrators, and researchers. This study also adds to the body of research regarding teacher stress, gratitude, well-being, and gratitude practices. Teachers can be encouraged by the results of this study to implement gratitude practices within their classrooms and in their day to day lives. The implementation of these gratitude practices could potentially bring about higher levels of well-being and gratitude among teachers.
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doi:10.1016/j.jrp.2007.11.003
APPENDICES
## APPENDIX A

### PARTICIPANT DEMOGRAPHIC CHARACTERISTICS

*Demographic Characteristics (N = 242)*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
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<td><strong>Gender</strong></td>
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<td></td>
</tr>
<tr>
<td>Male</td>
<td>115</td>
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</tr>
<tr>
<td>Female</td>
<td>125</td>
<td>51.7</td>
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<td><strong>Ethnicity</strong></td>
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<td>High School</td>
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<tr>
<td>Community college</td>
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<td>4-year college</td>
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<tr>
<td>Teaching certificate</td>
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<td></td>
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<tr>
<td>Face to face</td>
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<td>Fully online</td>
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<tr>
<td>Hybrid</td>
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<td>Face to face, Online</td>
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<td>Did not answer</td>
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<td><strong>Classify work as a teacher</strong></td>
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<td>Current Teacher Settings</td>
<td>Total</td>
<td>Average</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>Substitute teacher</td>
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<td>2.9</td>
</tr>
<tr>
<td>Home school teacher</td>
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</tr>
<tr>
<td>Preschool</td>
<td>21</td>
<td>8.7</td>
</tr>
<tr>
<td>Elementary school</td>
<td>57</td>
<td>23.7</td>
</tr>
<tr>
<td>Junior high or middle school</td>
<td>26</td>
<td>10.7</td>
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<td>High school</td>
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<td>2.9</td>
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<tr>
<td>4-year college</td>
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<td>Graduate school</td>
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<td>Preschool, Elementary</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Elementary, Junior high, High</td>
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<tr>
<td>Elementary, Graduate</td>
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<td>Junior high, High</td>
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<td>High, Community</td>
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<td>High, 4-year</td>
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<td>0.8</td>
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<tr>
<td>4-year, Graduate</td>
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</tbody>
</table>
APPENDIX B

CONSENT FORM

1. **Summary:** If you agree to participate in this study, you will be asked to answer survey questions that assess your stress, well-being, and gratitude levels. You will be asked to rate how different areas of stress affect you. You will also be asked if you mindfully practice gratitude and if you have had positive and negative experiences in your life as you have expressed gratitude to others.

2. **Your right to withdraw/discontinue:** You are free to discontinue your participation at any time without penalty. You may also skip any survey question that makes you feel uncomfortable. To receive the $0.50 for your participation, you will receive a completion code at the end of the study.

3. **Benefits:** Participation in this research study does not guarantee any benefits to you. However, possible benefits include the fact that you can learn something about how research studies are conducted and you may learn something about this area of research (i.e., gratitude and its relation to stress and well-being).

4. **Additional information:** You will be given additional information about the study after your participation is complete.

1. **Time commitment:** If you agree to participate in the study, it may take 10-15 minutes to complete the survey.

2. **Guarantee of Confidentiality:** All data from this study will be kept from inappropriate disclosure and will be accessible only to the researcher and their faculty advisor. Data collected online will be stored on a password-protected website and de-identified for analyses. The researcher is not interested in anyone’s individual responses, only the average responses of everyone in the study.

3. **Risks:** The present research is designed to reduce the possibility of any negative experiences as a result of participation. Risks to participants are kept to a minimum. However, if your participation in this study causes you any concerns, anxiety, or distress, please contact your local mental health provider. To locate treatment in your area you can contact the Substance Abuse and Mental Health Services Administration (SAMHSA) Treatment Referral Helpline at 1-800-662-HELP (4357).

4. **Researcher Contact Information:** This research study is being conducted by Katelyn Howell. The faculty supervisor is Dr. Harold Stanislaw, Professor, Department of Psychology and Child Development, California State University,
Stanislaus. If you have questions or concerns about your participation in this study, you may contact the researcher directly, khowell2@csustan.edu or through Dr. Stanislaw at hstanislaw@csustan.edu, (209) 667-3213.

5. **Results of the Study**: This research will be published and available through California State University Stanislaus, December 31, 2019.

6. **Psychology Institutional Review Board Contact Information**: If you have any questions about your rights as a research participant, you may contact the Chair of the Psychology Institutional Review Board of California State University Stanislaus, Dr. Kelly Cotter at PsychologyIRB@csustan.edu or (209) 667-3934.

7. **Personal Copy of Consent Form**: You should print the consent form now as you will not have the opportunity to view the consent form after the study.

8. **Verification of Adult Age**: By clicking “I Agree” below, you attest that you are 18 years old or older.

9. **Verification of Informed Consent**: By clicking “I Agree” below, you are indicating that you have freely consented to participate in this research study.
APPENDIX C

PERCEIVED STRESS SCALE (PSS)

Instructions: The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate how often you felt or thought a certain way.

0 = Never
1 = Almost never
2 = Sometimes
3 = Fairly often
4 = Very often

(R) = Reverse Scored

____ 1. In the last month, how often have you been upset because of something that happened unexpectedly?

____ 2. In the last month, how often have you felt that you were unable to control the important things in your life?

____ 3. In the last month, how often have you felt nervous and “stressed”?

____ 4. In the last month, how often have you felt confident about your ability to handle your personal problems? (R)

____ 5. In the last month, how often have you felt that things were going your way? (R)

____ 6. In the last month, how often have you found that you could not cope with all the things that you had to do?

____ 7. In the last month, how often have you been able to control irritations in your life? (R)
____ 8. In the last month, how often have you felt that you were on top of things?

(R)

____ 9. In the last month, how often have you been angered because of things that were outside of your control?

____ 10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
APPENDIX D

STRESS FACTORS SCALE (SFS)

Instructions: Use the following scale to rate how each item contributes to your stress.

1 = Not at all stressful
2 = A little stressful
3 = Somewhat stressful
4 = Moderately stressful
5 = Very stressful

___ 1. Students lack motivation
___ 2. Communication with parents
___ 3. The public’s attitude and misunderstanding about teachers’ workload
___ 4. Students’ misbehavior
___ 5. Management style of the school principal/administrator
___ 6. Additional administrative work
___ 7. Competition between classes/colleagues
___ 8. Too many students in one class
___ 9. Poor working conditions
___ 10. Have to attend too many meetings
___ 11. Class duties (e.g., collecting forms; grading school work)
___ 12. Dissatisfaction with subjects or grades being taught
___ 13. Changing education policy of the school board, or the institution, etc.
___ 14. Students with special needs in the class
___ 15. Insufficient teaching resources
___ 16. Students’ poor attitudes toward classroom tasks
17. Being observed by others, such as a colleague, student teacher, principal, or parent
18. Too much subject matter to teach
19. Break time is too short
20. Preparing for lessons
21. Finances
22. Immediate personal relationships (e.g., spouse, significant other, children, etc.)
23. Physical health
24. In general, how stressful is it to be a teacher?

If you find anything else very stressful please list it here: _______
APPENDIX E

SATISFACTION WITH LIFE SCALE (SWLS)

Instructions: Below are five statements that you may agree or disagree with. Using the scale below, indicate your agreement with each item. Please be open and honest in your responding.

1 = Strongly disagree
2 = Somewhat disagree
3 = Neither agree nor disagree
4 = Somewhat agree
5 = Strongly agree

___ In most ways my life is close to my ideal.
___ The conditions of my life are excellent.
___ I am satisfied with my life.
___ So far I have gotten the important things I want in life.
___ If I could live my life over, I would change almost nothing.
APPENDIX F

GRATITUDE QUESTIONNAIRE-SIX ITEM FORM (GQ-6)

Instructions: Using the scale below, indicate how much you agree with each statement.

(R)= Reverse Scored

1 = Strongly disagree
2 = Somewhat disagree
3 = Neither agree nor disagree
4 = Somewhat agree
5 = Strongly agree

_____ 1. I have so much in life to be thankful for.

_____ 2. If I had to list everything that I felt grateful for, it would be a very long list.

_____ 3. When I look at the world, I don’t see much to be grateful for. (R)

_____ 4. I am grateful to a wide variety of people.

_____ 5. As I get older I find myself more able to appreciate the people, events, and situations that have been part of my life history.

_____ 6. Long amounts of time can go by before I feel grateful to something or someone. (R)
APPENDIX G

GRATITUDE PRACTICE QUESTIONS (GPQ)

Instructions: How frequently do you participate in these gratitude practices?

1 = Never or almost never
2 = A few times each year
3 = A few times each month
4 = A few times each week
5 = Daily or almost every day

1. Greet students as they enter the classroom
2. Say positive or encouraging phrases to your students
3. Engage in conversation by being attentive to your students
4. Thank your students
5. Give gifts to colleagues, such as teachers or school staff
6. Gratitude journaling (for example: writing down a list of different things that you are grateful for).
7. Write thank you cards/letters.
8. Express gratitude to another in person or through a phone call.
9. Pray or express gratitude to God or the universe.
10. Use a gratitude app (for example: My Gratitude Journal, Grateful: A Gratitude Journal, Five Minute Journal, etc.).

- If you use a gratitude app, what do you use? _________
- Do you engage in any other gratitude practice that is not mentioned above? ___

Additional gratitude related questions:
1. Describe a time, if you had one, when you expressed gratitude and it was a good experience for you?

2. Describe a time, if you had one, when you expressed gratitude and it was a negative experience for you?
APPENDIX H

DEMOGRAPHICS QUESTIONNAIRE

1. What gender do you most closely identify with?
   Male        Female        Other        Decline to state

2. What is your age?

3. What best describes your ethnicity?
   - American Indian or Alaska Native
   - Asian
   - Black or African American
   - Hispanic or Latino
   - Native Hawaiian or Other Pacific Islander
   - White
   - Other:

4. Highest completed level of education:
   - Did not complete high school
   - High school
   - Community college
   - 4-year college
   - Teaching certificate
   - Graduate program
   - Doctoral program

5. In which of the following settings are you currently teaching? Check all that apply.
- Preschool
- Elementary school
- Junior high school or middle school
- High school
- Vocational school
- Community college
- 4-year college
- Graduate school

6. In which of the following formats do you teach? Check all that apply.
   - Face to face
   - Fully online
   - Hybrid

7. Which of the following would best classify your work as a teacher?
   - Full time
   - Part time
   - Adjunct
   - Substitute teacher
   - Homeschool teacher

8. How many years have you been teaching?

9. Any comments?
APPENDIX I

DEBRIEFING FORM

Thank you for participating in this study! We are interested in understanding the relationship between gratitude, stress, and well-being. Previous researchers have found a correlation between gratitude and stress levels. The higher a person’s gratitude level the less stress they experience. Prior studies have found that as individuals have high levels of gratitude they also have high levels of well-being. Researchers have also found that as individuals mindfully practice gratitude they subsequently have lower levels of stress and higher levels of gratitude when compared to their less grateful counterparts. It is expected that there will be similar results in this study.

All the information that is collected in this study will be kept safe from inappropriate disclosure, and there will be no way of identifying your responses in the data archive. We are not interested in anyone’s individual responses; rather, we want to look at the general patterns that emerge when all of the participants’ responses are put together. We ask that you do not discuss the nature of the study with others who may later participate in it, as this could affect the validity of our research conclusions.

If you have any questions about the study or would like to learn about the results of the study, you may contact me (Katelyn Howell) at khowell2@csustan.edu or through my research supervisor, Dr. Harold Stanislaw at hstanislaw@csustan.edu, (209) 667-3213.

If you have questions about your rights as a research participant, you may contact the Chair of the Psychology Institutional Review Board, Dr. Kelly Cotter, at PsychologyIRB@csustan.edu or (209) 667-3934.

If participation in the study caused you any concern, anxiety, or distress, you may contact your local mental health provider. To locate treatment in your area you can contact the Substance Abuse and Mental Health Services Administration (SAMHSA) Treatment Referral Helpline at 1-800-662-HELP (4357).

If you would like to learn more about this research topic, we suggest the following references:

APPENDIX J

STRESS FACTORS SCALE RESULTS

_Stress Factors Scale (N = 239 - 242)_

<table>
<thead>
<tr>
<th>Stressful Items</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ misbehavior</td>
<td>3.40</td>
<td>1.14</td>
</tr>
<tr>
<td>Finances</td>
<td>3.29</td>
<td>1.26</td>
</tr>
<tr>
<td>In general, stress of being a teacher</td>
<td>3.28</td>
<td>1.01</td>
</tr>
<tr>
<td>Students’ poor attitudes</td>
<td>3.17</td>
<td>1.20</td>
</tr>
<tr>
<td>Insufficient teaching resources</td>
<td>3.17</td>
<td>1.27</td>
</tr>
<tr>
<td>The public’s attitude</td>
<td>3.17</td>
<td>1.17</td>
</tr>
<tr>
<td>Too many students in one class</td>
<td>3.07</td>
<td>1.21</td>
</tr>
<tr>
<td>Additional administrative work</td>
<td>3.02</td>
<td>1.19</td>
</tr>
<tr>
<td>Communication with parents</td>
<td>2.98</td>
<td>1.23</td>
</tr>
<tr>
<td>Management style of principal</td>
<td>2.95</td>
<td>1.20</td>
</tr>
<tr>
<td>Students lack of motivation</td>
<td>2.93</td>
<td>1.15</td>
</tr>
<tr>
<td>Poor working conditions</td>
<td>2.91</td>
<td>1.33</td>
</tr>
<tr>
<td>Attend too many meetings</td>
<td>2.88</td>
<td>1.21</td>
</tr>
<tr>
<td>Class duties</td>
<td>2.83</td>
<td>1.16</td>
</tr>
<tr>
<td>Changing education policy</td>
<td>2.80</td>
<td>1.25</td>
</tr>
<tr>
<td>Being observed by others</td>
<td>2.72</td>
<td>1.26</td>
</tr>
<tr>
<td>Break time too short</td>
<td>2.69</td>
<td>1.19</td>
</tr>
<tr>
<td>Preparing for lessons</td>
<td>2.67</td>
<td>1.20</td>
</tr>
<tr>
<td>Too much subject matter to teach</td>
<td>2.66</td>
<td>1.15</td>
</tr>
<tr>
<td>Students with special needs in class</td>
<td>2.65</td>
<td>1.28</td>
</tr>
<tr>
<td>Immediate personal relationships</td>
<td>2.60</td>
<td>1.17</td>
</tr>
<tr>
<td>Dissatisfaction with subjects or grades</td>
<td>2.57</td>
<td>1.26</td>
</tr>
<tr>
<td>Physical health</td>
<td>2.45</td>
<td>1.21</td>
</tr>
<tr>
<td>Competition between classes/colleagues</td>
<td>2.26</td>
<td>1.14</td>
</tr>
</tbody>
</table>
# APPENDIX K

## GRATITUDE PRACTICE QUESTIONS RESULTS

*Frequency of Gratitude Practices (N = 242)*

<table>
<thead>
<tr>
<th>Gratitude Practices</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greet students</td>
<td>4.33</td>
<td>1.04</td>
</tr>
<tr>
<td>Engage in conversation with students</td>
<td>4.20</td>
<td>1.04</td>
</tr>
<tr>
<td>Say positive phrases to students</td>
<td>4.20</td>
<td>1.07</td>
</tr>
<tr>
<td>Thank your students</td>
<td>4.07</td>
<td>1.03</td>
</tr>
<tr>
<td>Express gratitude to another person</td>
<td>3.41</td>
<td>1.09</td>
</tr>
<tr>
<td>Pray or express gratitude to God</td>
<td>3.07</td>
<td>1.54</td>
</tr>
<tr>
<td>Write thank you cards/letters</td>
<td>2.64</td>
<td>1.09</td>
</tr>
<tr>
<td>Give gifts to colleagues</td>
<td>2.55</td>
<td>1.07</td>
</tr>
<tr>
<td>Gratitude journaling</td>
<td>2.43</td>
<td>1.36</td>
</tr>
<tr>
<td>Use a gratitude app</td>
<td>1.84</td>
<td>1.30</td>
</tr>
</tbody>
</table>
### APPENDIX L

### AGE, YEARS TEACHING, AND QUESTIONNAIRE CORRELATIONS

*Correlations between years teaching, age, and questionnaire scores*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td></td>
<td>8.11</td>
<td>6.87</td>
<td></td>
</tr>
<tr>
<td>2. Years Teaching</td>
<td>.83**</td>
<td></td>
<td>34.08</td>
<td>8.99</td>
</tr>
<tr>
<td>2. Stress</td>
<td>-.16*</td>
<td>.11</td>
<td>1.66</td>
<td>0.71</td>
</tr>
<tr>
<td>2. Well-being</td>
<td>-.08</td>
<td>-.07</td>
<td>3.65</td>
<td>0.91</td>
</tr>
<tr>
<td>3. Gratitude</td>
<td>.19**</td>
<td>.15*</td>
<td>3.95</td>
<td>0.75</td>
</tr>
<tr>
<td>4. Gratitude Practice</td>
<td>-.04</td>
<td>-.10</td>
<td>3.27</td>
<td>0.57</td>
</tr>
</tbody>
</table>

** Correlation is significant at the .01 level (2-tailed).
* Correlation is significant at the .05 level (2-tailed).
APPENDIX M

CORRELATIONS AMONG ALL PARTICIPANTS

*Correlations of all respondents before exclusions (N = 490 – 492)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stress</td>
<td></td>
<td></td>
<td></td>
<td>1.66</td>
<td>0.71</td>
</tr>
<tr>
<td>2. Well-being</td>
<td>-.36**</td>
<td></td>
<td></td>
<td>3.65</td>
<td>0.91</td>
</tr>
<tr>
<td>3. Gratitude</td>
<td>-.56**</td>
<td>.27**</td>
<td></td>
<td>3.95</td>
<td>0.75</td>
</tr>
<tr>
<td>4. Gratitude Practice</td>
<td>-.06</td>
<td>.27**</td>
<td>.05</td>
<td>3.27</td>
<td>0.57</td>
</tr>
</tbody>
</table>

** Correlation is significant at the .01 level (2-tailed).