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Stress and Social Media: Implications for Nurses' Quality of Life

by

Crystal A. Goodman

A thesis submitted to the faculty of Gardner-Webb University Hunt School of Nursing in partial fulfillment of the requirements for the Master of Science in Nursing Degree

Boiling Springs, North Carolina

2017

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#### Abstract

This study sought to explore relationships between nurse stress, social media use, and emotional wellbeing. Social media being such a popular trend, has been studied a lot in recent years to determine impacts on health. Nurses are also impacted by this societal trend and research has not focused on this particular group to see how it impacts their emotional wellbeing. The framework for this research was Cognitive-Relational Theory and Margaret Newman's Theory of Expanding Consciousness. A review of literature was performed to gather data on direct care nurse stress, social media use, coping mechanisms, quality of life, and strategies for improvement. A voluntary survey was sent out through the local nurses' organizational newsletter with participation from 55 direct care nurses. Relationships with overall work related stress and total quality of life scores were found, but no relationship was found between the total group's social media use and work related stress scores. A slight relationship was found between the 18-29 year old group social media use and work related stress score, p=0.06, with lower rates of work related stress correlating with increased use of social media. There was no significance, p=0.78, in the relationship between social media use and emotional wellbeing. Mean scores on two of the social wellbeing questions on the MHC-SF indicate a need for further investigation into impacts that social media has on the way nurses perceive society and how this impacts the care they provide to their patients. There were several limitations of the study, and further investigation is indicated, as results contradict results from other findings in the general population.

*Keywords*: nurse stress, quality of life, stress, social media, nurse health, coping, well being

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#### **CHAPTER I**

#### Introduction

Accessibility of the internet in people's daily lives has significantly increased over the past decade. Individuals carry smart phones, tablets, and other devices that give them the ability to access the internet anytime they want. Nurses are not excluded from this societal trend. The increased access allows patient records, medication information, and professional networking opportunities to be more readily available. Many individuals utilize social media for information on current events, politics, and general news, making it the most modern form of media. However, there is little data to show how often it is being used, how it is being used in the day-to-day lives of nurses, and the impact it has on the nurse-patient relationship and nurses' perceptions of the patients they care for. Nursing has been named one of the most stressful professions. In identifying behavioral connections related to the stress that direct patient care nurses experience, their personal use of social media, and the impact on the nurses' emotional quality of life, nurses may be able to identify negative behaviors in themselves and patients to improve quality of life.

#### Significance and Background

Nursing has long been known as a stressful career. While stress can decrease overall health, it is important for nurses to remain healthy. This is essential to organizations, as nurses are teaching patients about healthy practices and ways to improve their quality of life. However, research indicates that nurses themselves are not healthy. About 1/3 of nurses do not exercise, with 13.6% reporting hypertension, 21.5% high cholesterol, 65.4% body mass index greater than 29, and one in 10 use tobacco. The professional and personal demands of nursing leads to increased chronic stress, disproportionate work life balance and engagement in unhealthy coping mechanisms (Jordan, Khubchandani, & Wiblishauser, 2016).

Social media has negative impacts on mental health, damaging effects on psychological functioning, and leads to productivity loss, stress, and the development of guilt and personal crisis from impairment in productivity (Gok, 2016). Studies have shown that heavy exposure to media before bed impacts the amount and quality of sleep. Adults need at least seven hours of uninterrupted sleep, however, exposure to media results in less REM and non-REM sleep patterns. Lower amounts of sleep have been associated with lower performance rates and decreased mood stability. Alternatively, regular sleep patterns are associated with a more positive mood, and availability of positive coping mechanisms to deal with emotional stressors (Gever, 2015).

#### **Conceptual Framework**

According to Cognitive-Relational Theory, a person responds to stress through constant interaction with their environment and resources for coping. The person is in constant exchange with the environment, the stressor, personal coping mechanisms, resource availability and emotional response to stress. When a person seeks immediate relief from the emotional stressor, it leads to either, beneficial or harmful coping mechanisms, and positive or negative health effects. This theory of stress response involves the individual's personal beliefs, characteristics, antecedents, and mediating processes, such as situational variables and options for coping (Lazarus, 1966). For example, a nurse at work confronted with continual stress, may be presented with a need for distraction from a stressful day and has limited coping options based on availability. Since smartphones are so popular today, it's easy to log into social media and look at social media for a few minutes of distraction, while another option may be getting coverage to leave the unit and go sit in the hospital's courtyard and practice mindfulness outside for 15 minutes. Leaving the unit and taking time to go outside, go for walks, or meditate is effective and healthy for stress relief, while there is limited information on social media use during periods of high stress.

Stress forces people to choose between problem-based or emotion-based coping, ultimately affecting mental quality of life and leading to the development of a behavioral pattern, whether healthful or damaging (Sriwilai & Charoensukmongkol, 2015). An emotion-based response would cause the nurse to access social media for distraction or to escape after a stressful event. Alternatively a problem-based solution would have more positive benefits because the nurse would actively face the stressor through thought and action. Unknowingly, the repeated use of social media to cope with emotions could lead to health and emotional impairments that negatively impact the quality of life.

Margaret Newman's Theory of Health as Expanding Consciousness states that excessive stress can cause internal chaos and psychological and emotional disruption that manifest in patterns that are not recognized externally (Pharris, 2015). Recognition of patterns and choices leads to the potential for action and expanded consciousness. Newman defined consciousness as the ability of the system or person to interact with their environment. When someone is conscious they are present and aware of their interaction with the environment and grow from a pattern, which has particular meaning (Newman, 2008). Nurses must focus on harmony and balance, not solely on disease patterns to be fully present with their patients and therefore, fully present in their own harmony and balance (Newman, 2008). In order to assist patients to recognize their own disorganization and help them to evolve to a higher level of consciousness, the nurse must first investigate their personal disorganization and coping. This helps the nurse to better understand the patient's condition and to become conscious of their own behaviors. The nurse then becomes a more effective teacher, assisting patients with exploration into their disorganized coping, seeking to understand it's meaning, and being able to overcome the obstacle with new recognition and healthy coping mechanisms.

Bateman and Merryfeather (2014) noted that the nurse must be completely present and free of judgment. The change process goes through a period of ambiguity, chaos, and imbalance. This process not only uncovers patterns for the client, but for the nurse themselves. Nurses must be aware of their own imbalances and chaotic periods for growth and change. For nurses, the ability to understand health and quality of life from an enlightened perspective could help patients to do the same in their lives, leading to improved patient care outcomes and better quality of life for both the nurse and the patient (Bateman & Merryfeather, 2014). This growth and knowledge helps nurses understand the pain, sorrow, joy and overall human experience their patients experience, as they are better able to relate to their struggles.

#### Purpose

The purpose of this study is to examine nurse stress and the resulting coping behaviors, particularly the use of social media. Nurses working long shifts in highly acute areas are faced with time constraints diminishing the time and energy available for positive self-care behaviors. Stress can lead to reactionary patterns for unhealthy use of media, including social media. Finding a relationship between stress behaviors and social media use can lead to recognition and further exploration of self-care limiting behaviors. Previous research has explored the effects of social media on adolescents and young adults, but studies have been limited in terms of how nurses are using social media in their free time and the impact that use has on their emotional wellbeing.

Study results have the potential to enhance awareness of negative stress-coping behaviors and their impact on patient care. Nurses can not only change their own mental health through recognition of maladaptive behaviors, but can also serve as change agents in the health of the public through role-modeling positive stress coping, and effective education and advocacy.

This study aimed to determine if correlations exist between nurse's stress, use of social media, and their quality of life. The research questions were:

- Is there a relationship between work-related stress and the use of social media for nurses?
  - H<sub>0</sub>: there is not a relationship between work-related stress and social media.
  - H<sub>a</sub>: there was a relationship between work-related stress and social media.
- Is there a relationship between social media and nurses' emotional quality of life?
  - H<sub>0</sub>: there is not a relationship between social media and nurse's emotional quality of life.
  - H<sub>a</sub>: there is relationship between social media and nurses' quality of life.

#### **CHAPTER II**

#### **Literature Review**

Many studies have explored work related stress and its impact on nurses. As social media is a modern facet of our daily lives, recent research has been focused on its positive and negative effects. A literature review was performed using CINAHL, PubMed, and PsychINFO using mesh terms [nurse stress, quality of life, stress, social media, nurse health, coping] to get broad results for investigating nurse stress and social media use, as well as potential impacts on emotional quality of life. Articles included were current in the last 5-10 years, with a few exceptions for relevance and importance to topics. Furthermore, evidence was found to support the nature and frame for the research.

#### **Factors Affecting Stress Level of Nurses**

There are many factors that influence stress levels of direct care nurses. Nursing practice requires hard labor throughout the shift in demanding and high stress environments. There is increased risk of burnout and emotional exhaustion, negative attitudes towards other people, and diminished feelings of accomplishment. These factors can lead to poor performance and safety concerns at work, as well as impaired physical and mental health for the nurse (Chang & Chan, 2015).

Exhausting, extensive work hours, heavy workflow, and a lack of physical and financial resources can increase the stress experienced on the job (Rocha, Martino, Grassi-Kassisse, & Souza, 2013). Long work hours with many interruptions, competing factors for their time and energy such as patient needs, patient family needs, supervisor and physician relationships, co-worker relationships, skills, heavy patient tasks, organizational policy drivers, and the demands of personal life can lead to increased, chronic stress (Jordan et al., 2016). The impacts of these competing demands and challenging work schedules can result in emotion-based coping mechanisms.

Another element that leads to increased stress is continual use of emotional labor. "Emotional labor is defined as the public appearance that one must hold facial and body expression to maintain a certain social presence that is acceptable to those around them" (Delgado, Upton, Ranse, Furness, & Foster, 2017). Having to suppress inner feelings of anger and frustration while maintaining an appearance of acceptance, particularly in tough emotional and physical challenges is taxing. With continually challenging situations and dynamic changes, having to mask emotions creates an additional stressor that leads to exhaustion and burnout. It has been reported that 92% of nurses rated their work related stress as moderate to very high with most categorizing their stress as very high (Jordan et al., 2016).

#### **Effects of Stress in Nursing**

Continual stress can have both positive and negative effects, and can result in behavioral, physical, and emotional responses. It can be motivating and increase the work output, or be damaging, causing health issues, work dissatisfaction, absence, and disinterest in patients, particularly if the stress is outside of their ability to cope (Najimi, Goudarzi, & Sharifirad, 2012).

Behavioral coping responses to stress can be either adaptive or maladaptive. Maladaptive behaviors like avoidance and self-medication actually increase the person's psychological stress and impair their physical health over time. Exposure to continued stress and symptoms of compassion fatigue, or secondary trauma, symptomatically has

been compared with post-traumatic stress disorder, which leads to maladaptive coping behaviors for dealing with chronic stress. Secondary trauma occurs with the repeated exposure to hearing or seeing other's traumatic life experiences and the outcomes and consequences. Maladaptive coping behaviors include self-distraction, denial, behavioral disengagement, and blaming self. Alternatively, there are behaviors that can actually be beneficial ways to deal with stress. These adaptive coping mechanisms can completely eliminate the stressor and decrease stress. Examples of adaptive positive coping behaviors include active and engaged coping, physical support, and acceptance (McMeekin, Hickman, Douglas, & Kelley, 2017). Active engaged coping is when someone identifies the stressor, and changes the nature of the stressor and how they think about it to reduce the effects (Holahan & Moos, 1987). The behavior response seeks a solution where there is choice between an immediate reward or a reward that takes time and work to accomplish. If the outcome can be reached through a solution that is more immediate but utilizes a source that can result in impulsivity and repetitive behaviors, the behavior is maladaptive. Adaptive behaviors also seek to gain the same outcome, but the benefit is delayed and uncertain (Kim & Lee, 2011).

The body's psychophysiological reaction to stress, results in a fight or flight response with the anticipation of danger. Both the cortex and sub-cortex play a role in mediating whether a behavior becomes adaptive or maladaptive. This mechanism increases adrenal response, and with continual triggers, leaves the person susceptible to detrimental health problems from continuous stress (Piotrowski & Hollar, 2017). The hypothalamus in the central nervous system regulates the body's' physiological response to stressors. In response to an internal and external stressor, the hypothalamus works with

the autonomic and endocrine systems to help the body cope with changes resulting from the stressor. It communicates with the pituitary gland in response to stress that releases adrenocorticotropic hormone and stimulates the adrenal gland, which releases cortisol (McLeod, 2010). Nurses have shown to have significantly higher salivary cortisol levels when working on a shift in direct care than when they are off work. Nurses who work overtime shifts had even higher levels of salivary cortisol. Repeated disturbances in serum cortisol can affect physical, mental and social health. Cortisol causes the release of glucose from the liver through glycolysis for energy, while suppressing the immune system (Rocha et al., 2013). When the adrenal gland is stimulated by the hypothalamus, adrenaline is released. Adrenaline stimulates the sympathetic nervous system and decreases responses from the parasympathetic nervous system. This response slows gastrointestinal motility and increases the heart rate, blood pressure and excretion of sweat (McLeod, 2010). Studies have shown that this continued response overtime could also lead to vascular and cardiac changes, and ultimately chronic heart disease (Johnston et al., 2016).

Stress also plays a part in physical changes. Some studies have shown an average BMI of 27.92 in nurses, which is overweight. They report eating more, and on average sleep less than usual when under high work stress. On average they felt healthy and had plenty of energy less than 50% of the time and typically felt anxious, worried, or tense almost half of the month (Jordan et al., 2016). Links between chronic psychological, physiological disease, and chronic stress are clear. More attention is needed on the effects of chronic stress in everyday life, especially in today's fast paced society (Piotrowski & Hollar, 2017). Stress can be detrimental to a person's emotional health, especially in the case of chronic ongoing stress, common in nurses delivering direct patient care. Fradelos et al. (2014) investigated nurse health in relation to stress and showed the link between stress and emotional exhaustion, emotional fatigue and poor social functioning. Continuous exposure to psychological and physical impairments in the patient population, requiring a high use of emotion, can lead to decreased emotional resources. Healthy behaviors can also decrease, which impacts emotions. Four out of five nurses get less than eight hours of sleep each night, do not exercise regularly, don't eat enough fruits and vegetables, and 1/5 report heavy drinking and tobacco use (Jordan et al., 2016). Burnout and work related stress could have a strong impact on quality of life scores. In one study, nurses who had higher QOL had higher social functioning scores (Fradelos et al., 2014). Social functioning is the way a person interacts with their environment, and how well they carry out their role in personal and professional relationships. A decrease in social functioning score has been correlated with higher rates of depression (Bosc, 2000).

#### **Quality of Life**

QOL can be broken down into four categories consisting of physical condition, internal psychological process, social standing, and spirituality. One's perception of QOL can be defined in broad ranges, but generally interpreted as one's capacity to live a normal life, increased feelings of positivity while balancing negative, satisfaction with one's place and physical being in life, personal goal achievement, feelings of making positive societal contributions, and the richness of personal relationships (Carr, 2007).

QOL can be influenced by a variety of internal and external factors. In nursing, physical, mental, social and spiritual influences can affect the nurses' QOL. This is

furthermore influenced by work related stress, work conditions, poor work relationships, risks in care, moral, and ethical distress (Cruz, 2016).

#### Social Media Use

Social media, which is electronic communication where users can share information, ideas, videos, and personal information, is a modern media trend, and widely available today. It can be accessed at any time through a computer, smartphone, or other mobile devices. Some popular sites of social media today are Facebook, Instagram, Pinterest, LinkedIn, Twitter, etc. It is not uncommon to see people using their devices while walking, at work, or in other areas of day-to-day engagement. People access social media for a variety of different reasons, whether professional or personal. Studies have shown both the positive and negative outcomes of social media use (Jones et al, 2016).

Increased use of social media has been associated with higher emotion based coping strategies, lower incidence of mindfulness, and increased emotional exhaustion (Sriwilai & Charoensukmongkol, 2014). General media (television, internet, smartphones, video games, etc.) can be utilized to find distraction from one's problems and troubles in life. Knobloch-Westerwick, Hastall, and Rossman (2009) explored the use of media for escapism and coping. Satisfaction in the life domains of health, finances, friendship, career, and relationships influenced selective exposure to media and patterns. If someone was dissatisfied with one a life's facets they spent more time using media to look at subjects pertaining to that area of life (Knobloch-Westerwick et al., 2009).

Jones et al. (2016) compared use of LinkedIn with depression and anxiety in

young adults. Researchers found that <sup>3</sup>⁄<sub>4</sub> of adults used social media and spent approximately 1.72 hours a day on it. Increased rates in depression were found in respondents using LinkedIn at least once per week. Increased anxiety was also found in respondents that used LinkedIn more than once per week. The results were consistent with findings from other studies showing that social media is correlated with depression and anxiety (Jones et al, 2016).

Easy access and continuous use of social media in day-to-day life could also lead to problematic Internet use. Correlations have been found between problematic Internet use and negative life satisfaction (Lachmann, Sariyska, Kannen, Cooper, & Montag, 2016). Use can also decrease the amount of time being productive and completing one's responsibilities. Gok (2016) evaluated student-studying habits in relation to the amount of time spent using social media. Eighty-five percent used a smartphone to access social networking sites for one and a half hours daily, and spent between two to three hours on a computer accessing social media. Sixty percent did not find time to go to the gym or engage in physical activity. Time spent studying, reading books, or other leisure activities also decreased. This showed significant impact in the use of social media in these student's lives and other important life activities (Gok, 2016).

Screen time, or time spent using things such as television, computers, games, and smartphones (Strasburger, Jordan, Donnerstein, 2015) has been connected with sleep impairments in adults. Studies have shown people with smartphones commonly access social media before going to bed and when first waking up in the morning. Handheld devices that emit light have been found to delay the ability to fall asleep and decrease melatonin levels as opposed to reading printed books prior to sleep. Greater than six

hours of screen time daily has been associated with difficulty falling and staying asleep when compared to using less than two hours of daily screen time (Hale, Emanuele, & James, 2015).

In general, media has been found to influence perceptions about QOL norms of patients. Media not only influences the perceptions of patients, but also the nurses caring for them. Media portrays an ideal QOL, which includes good health, happiness, safety, and support. This false ideal can skew a person's perception of what reality is, or should be, leading to disappointment if they do not meet this media model of life. Media has also been shown to skew perception and send messages of propaganda and fear, which can influence the masses as described in Mass Society Theory (Carr, 2007).

Nurses are not exempt from this misinformation and propaganda. Social media in particular connects large groups, impacting social, cultural, political, and economic wellbeing. This can influence the individual's interpretation of this information (Edginton & Jalloh, 2014). Generally, the public turns to media to get information about the world around them and find answers about current events and science. Information communicated by media is based on reflection of the argument or opinion of the individual or group presenting the message. This can have a potentially negative impact on perceptions, influencing cognitive and affective reactions, decision-making, and emotional responses (Peters & Dunwoody, 2016).

Social media has been shown to benefit nurse's professional development, and can improve access to resources, support and education on crucial health topics. When used for reliable health information and professional development, this platform is positive and beneficial (Sriwilai & Charoensukmongkol, 2014). Social media can be beneficial to health and QOL. Campisi, Folan, Diehl, Kable, and Rademeyer (2015) showed that people who had positive associations with social media had a higher QOL, whereas those who reported negative associations with social media use had a lower QOL. Therefore, social media use and whether it impacted their QOL depended on whether they perceived it was a positive or negative influence in their lives (Campisi et al., 2015).

Social media can give the social support system needed to cope with personal challenges. Salzmann-Erikson and Hiçdurmaz (2017) evaluated a population of PTSD sufferers who utilized social media platforms to connect to others for use as a self-care tool. They found that the users were able to heal and grow from being able to tell their story, receive comments, and make connections with others that had experienced similar trauma. These online narratives were an effective source of coping for these PTSD sufferers in this qualitative analysis (Salzmann-Erikson & Hiçdurmaz, 2017).

#### **Stress and Coping**

Emotion based coping, a reactive mechanism, is a response to stress that seeks to put the stressor at ease, with immediate coping mechanisms for elimination of the emotion. Proactive coping is an action-based strategy, typically viewed as the more positive coping mechanism. This is where the response to a stressor results in personal change and strategies to deal with the stressor and eliminate it through life modifications (Lazarus, 1966).

Holton, Barry, and Chaney (2016) investigated people who reported common stress at work. The study examined how employees coped with stress, determining if coping was adaptive or maladaptive, and what influenced the individual's stress management. Adaptive coping strategies were classified as doing things like exercise, talking with friends, or talking with a licensed therapist in the last 30 days. Maladaptive coping strategies were defined as dysfunctional eating, drinking, smoking, gambling, etc. over the last 30 days. Perceptions of stress management techniques were classified using a simple question of how the person thought that they managed stress. The study found a correlation between respondents that used adaptive forms of stress management and the person's reported perception of how they positively coped with stress (Holton et al., 2016).

#### **Strategies for Improvement**

Healthy Nurse Healthy Nation initiative states that nurses are influential in the role they play in the health of their patients and communities. With healthy nurses performing at maximum potential, their capacity to be role models and educators on wellbeing for their patients, communities, and national health is influential. Recognition and action of maladaptive patterns, and call for action, could shed light on health of communities at large. This can influence action for improved health of the community through a nurse's own action of health (Shaeffer, 2016). It is estimated that by year 2020, global health will be impacted significantly by mental illness and stress related disorders. It is imperative that nurses seek a mentally healthy lifestyle for themselves to reach the global health community (Seda, 2014).

Research has shown that building resiliency to overcome physical and emotional challenges of nursing by providing tools to be able to effectively cope with stress is effective. Resiliency increases wellbeing, decreases psychological trauma and physical ailments acquired from chronic stress. Nurses that have increased their resiliency through actively dealing with their emotions, as opposed to those who suppress feelings by using maladaptive coping mechanisms, increased nurse's emotional QOL (Delgado et al., 2017). Providing programs to nurses that use strategies to establish use of adaptive coping mechanisms have a greater effect in reduction of stress and stress-management instead of programs that use maladaptive stress reduction techniques (Holton, Barry, & Chaney, 2016).

Another strategy is increasing one's emotional intelligence. Emotional intelligence, work stress, health, and socio-economic variables can all influence someone's ability to cope. Landa, Lopez-Zaphra, Martos, and Aguilar-Luzon (2008) investigated if emotional intelligence had a positive relationship with health, and alternatively if a lack of emotional intelligence had negative relationship with stress. Lower levels of awareness of emotional states correlated with higher work related stress. Lower emotional intelligence was also found to be linked to increased physical pain, mental and physical health problems. Awareness of self and patterns, by increasing one's emotional intelligence was found to have beneficial results in ability to cope and response to stressors (Landa et al., 2008).

Nurses depend on society support, organizational support, and fellow workers, which with high reports of feeling unsupported leads to high intent to leave. Feelings of social support are positively influenced by internal support such as family, staff members, and organizations as well as external support such as public and media support. Holistic support needs of nurses are hope, confidence, motivation, and pleasure, which result in a greater sense of social wellbeing. Assisting the nurse with gaining the social support they need has positive effects on nurses' wellbeing (Mozaffari, Peyrovi, & Dehghan, 2015). There are many factors that contribute to the stress of direct care nurses. Coping mechanisms are individualized and research has shown that coping resources can be both adaptive and maladaptive. Social media is a trend that has been studied a lot in recent years on the general population for effects on QOL and has been shown to be both positive and negative. There is limited research to gain insight to direct care nurses using social media and whether its use is adaptive or maladaptive, and what impacts it could have on emotional quality of life. Current nursing initiatives are in place to reduce nurse stress, improve their QOL, and make them healthy role models for the populations that they care for. Further investigating a potential relationship between direct care nurse stress and social media use could give insight to improving the health of nurses and improving the health of the nation.

#### **CHAPTER III**

#### Methodology

This quantitative, correlational study sought to determine if a relationship existed between work-related stress, social media use, and emotional quality of life for practicing nurses. The study also attempted to determine if social media use was an adaptive or maladaptive coping mechanism of stress through determining whether a relationship existed between social media and emotional quality of life.

#### Setting, Sample, and Data Collection

A recruitment letter and survey link were placed in the North Carolina Nurses Association (NCNA) electronic newsletter, which was mailed to all NCNA members with registered email addresses. Convenience sampling was used, as the newsletter is sent to all nurses who are registered with the organization.

Surveys were administered anonymously via Survey Monkey<sup>®</sup>. Responses were maintained for the confidentiality of all participants. Survey questions were formatted as multiple-choice questions and used two reliable scales to measure stress and emotional wellbeing. After explaining the purpose of the study, procession of participating in the survey quantified as consent. The survey remained open for one week. The researcher gathered the data through scored question responses of the survey and was completed in May of 2017.

#### **Protection of Human Subjects**

The University Institutional Review Board granted approval for the study (Appendix A). The survey platform utilized was HIPAA compliant and was not deceptive in nature and participation was completely voluntary with no risk to the participant. No personal identifiers were obtained. Responses remained anonymous. Copies of the survey responses were kept in a secured area at the School of Nursing for three years, after which they were destroyed. Electronic data analysis was maintained on a passwordprotected computer.

#### **Measurement Methods**

The survey began with demographic questions, including gender and age (Appendix B). Next, to measure work related stress, the Work Related Stress Scale was used (Appendix C). This was a Likert type scale with answer choices ranging from 0 (never) to six (always). The scale asked four questions to rate work stress. The scaled statements were:

1. The demands of my job make it difficult to be relaxed at home.

- 2. I feel overwhelmed by my workload.
- 3. I feel guilty when I'm not working
- 4. I have unrealistic time pressures in my job.

The authors tested this scale in measuring the work stress of mothers that were employed in academia at a Canadian University and found it to be a reliable measure of work related stress (McCutcheon & Morrison, 2016).

The survey asked the participant to estimate the amount of time daily that was spent using social media and what sites or information they used most. These questions were in a multiple-choice format. Next, to measure emotional quality of life, the Mental Health Continuum Short Form (MHC-SF) was used (Appendix D). The statements were also scored by participants using a Likert type scale of 0 (never) to five (every day). The instrument asked participants questions about their happiness, general social wellbeing, feelings toward society, social groups, daily responsibilities, and their own personality. This scale was shown to be consistent, valid and reliable in U.S. adults for measurement of emotional, psychological and social wellbeing with internal consistency of >0.80. Its test retest reliability of 0.68 was shown consistent over a three-month period (Keyes, 2009).

#### **Data Analysis**

Data was transferred into JMP for statistical analysis. Psychological and social wellbeing scores, as well as demographic data were reported using descriptive statistics. The emotional wellbeing sub category scores were used to determine if correlations existed between the respondent's score on the emotional wellbeing section of the MHC-SF and the amount of social media used. Also, scoring on the Work Related Stress Scale was determined and compared with the amount of social media that they used. Strong statistical correlations were defined as level of significance p< 0.05.

#### **CHAPTER IV**

#### Results

#### **Sample Characteristics**

The survey remained open on the platform Survey Monkey for one week in May of 2017. A total of 63 participants completed the survey, with 55 nurses meeting inclusion criteria as direct care nurses. Of the 55 nurses, most were female (98.18%), as shown in Table 1. Participant ages ranged from 18 to greater than 60, with most falling in the 18-29 category (45.45%). The data analysis was not separated by gender as there were limited male participants (n=1) to determine a significant difference in results. All 55 participants included in data analysis answered 100% of the survey with no skipped questions.

#### Table 1

Variables	%	Ν
Male	1.80%	1
Female	98.20%	54
18 – 29	45.50%	25
30 - 44	40.00%	22
45 - 59	10.90%	6
60+	3.60%	2

Demographics of Participants (n=55): gender, age

#### **Descriptive Statistics**

The highest reported amount of time spent on social media was two – three hours a day (49.1%), followed by zero - one hour a day (34.5%), four - five (12.7%), six - seven (1.8%) and greater than seven (1.8%). The overall mean for amount of time spent daily using social media was 1.87 hours. The highest reported reason for participants using social media was "posting and looking at pictures" (Instagram, Facebook, Snapchat, etc) category at 52.7%, followed by "seeing what friends are up to" (40%), Pinterest (5.4%), and last "catching up on news and current events" (1.8%).

#### **Mental Health Continuum Short Form**

Continuous scoring was used to calculate scores on the Mental Health Continuum Short Form (Keyes, 2009). Total scores in the scale were classified on a 0-70 range, with a score of 0-29 classified in the languishing category, 30-59 classified as having moderately healthy mental health, and 60-70 as flourishing mental health. Subscales were further broken down for analysis on a continuous scale. Subscale in the emotional section (questions 1-3) was calculated on a range of 0-15, with 0-5 categorized as languishing emotional health, 6-11 as moderately emotionally healthy, and 12-15 as flourishing emotional health status. Subscales for social (0-25) and psychological sections (0-30) were not used in descriptive statistics but used as baseline data as shown in Table 2.

#### Table 2

М	In the last month how often have you felt
3.92	Нарру
4.23	Interested in Life
3.71	Satisfied with Life
3.4	Something important to contribute to society
2.85	That you belonged to a social group
2.2 2.87	That our society is becoming a good place or better for all people That people are basically good
2.07	The way our society works makes sense to you
3.75	You like most parts of your personality
3.36	Good at managing the responsibilities of your daily life
3.93	That you had warm and trusting relationships
3.45	That you had experiences that challenged you to grow and become a better person
3.95	Confident to think or express your own ideas and opinions
3.62	That your life has a sense of meaning to it
47.32	MHC-SF
11.87	Emotional
13.4	Social
22.05	Psychological

MHC-SF Question Means

### Work Related Stress Scale

Scores on the Work Related Stress Survey were interpreted on a continuous scale with higher scores indicating higher work related stress (McCutcheon & Morrison, 2016). Answers were reported on a Likert-type scale in a 0-6 range. The mean for the 55 participants on the Work Related Stress Scale (WRSS) was 9.2, as demonstrated in Table 3, with means for age groups being similar in total values to the value of the group (Table4). Continuous scoring on a 0-24 scale, categorized the mean of participants as having low to moderate work related stress.

## Table 3

WRSS Means

М	
2.45	The demands of my job make it difficult to be relaxed at home.
2.76	I feel overwhelmed by my workload.
1.2	I feel guilty when I'm not working
2.8	I have unrealistic time pressures
9.21	Work Related Stress Total

### Table 4

WRSS Total Means by Age Group

Age	Ν	М	SD
18-29	25	9.64	3.41
30-44	22	9	4.62
45-59	6	8.5	3.14
60+	2	8.5	4.94
Total	55	9.21	

Continuous scores on the Mental Health Continuum Short Form (MHC-SF) had an average mean of 47.32, which was categorized as a moderately healthy quality of life. Differences by age group were not significantly different from the total mean as demonstrated in Table 5. The age group of 60+ had the highest mean MHC-SF score at 57, which was categorized at the higher end of moderately healthy quality of life, almost flourishing.

#### Table 5

Age	Ν	М	SD
18-29	24	47.0	12.7
30-44	22	46.7	10.3
45-59	6	47.1	16.1
60+	2	57	12.7
Total	55	47.3	

MHC-SF Means by Age Group

Results showed that total scores on the Work Related Stress Survey and MHC-SF had a linear relationship. Higher scores of work related stress were associated with lower overall scores on the MHC-SF (Figure 1).

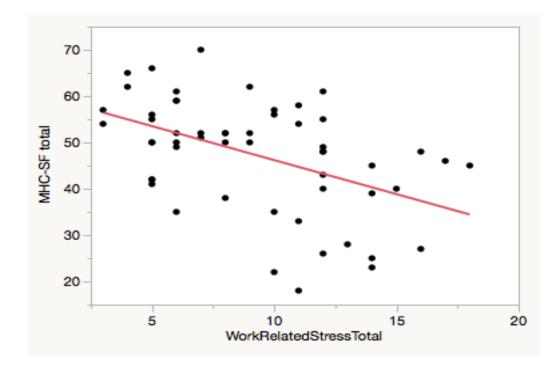


Figure 1. WRSS Total by MHC-SF Total

The first research question asked if there was a relationship between work related stress and social media use in direct care nurses. Using Pearson R to determine a relationship in the overall group (n=55), the results were not statistically significant (p=0.14) with means for work related stress having great variation with time spent using social media as shown in Table 6.

The two groups of social media use zero - one and four - five hours a day had the highest work related stress score of 10.05 and 10. The group that reported using social media six or more hours a day had the lowest score of six on work related stress followed

by the group reporting four - five hours of social media use daily (Table 7). There was a slight relationship (p=0.06) in the 18-29 year old group between work related stress scores and time spent on social media daily (Table 6 and Figure 2).

# Table 6

		Ν	М	SD	Pearson R
18-29	Hours	25	2.2	1	-0.38
	WRSS		9.64	3.41	p=0.06
30-44	Hours	22	1.63	0.49	0.08
	WRSS		9	4.62	p=0.7
45-59	Hours	6	1.6	0.81	-0.54
	WRSS		8.5	3.14	p=0.26
60+	Hours	2	1	*	0
	WRSS		8.5	4.94	
All	Hours	55	1.87	0.84	-0.2
	WRSS		9.21	3.88	p=0.14

Social Media Use and	Work Related	Stress Score	(n=55)
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\*Limited Sample

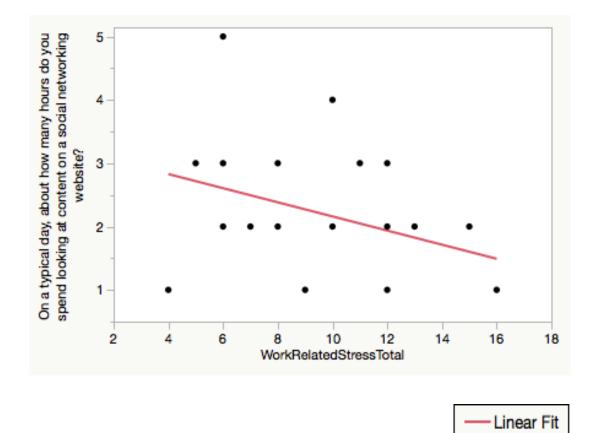


Figure 2. Age Group 18-29 WRSS vs. Hours on Social Media

## Table 7

Hours on Social Media Daily and WRSS (n=55)

Hours on Social Media	WRSS Mean	
0-1	10.05	
2-3	9.14	
4-5	7.57	
6-7	10	
7+	6	

The second research question asked if there was a relationship between social media use and emotional wellbeing. To determine a correlation, Kendall's Tau was used to compare amount of social media use to scores on the emotional subscale of the MHC-SF. The overall mean of the emotional wellbeing subscale was 11.87, which is moderate to almost flourishing emotional wellbeing. The group with the highest emotional wellbeing scores was the 60+ age group (M=13). There was no statistical significance to support the alternative hypothesis in the overall group of participants between social media use and emotional wellbeing (p=0.78). Separating the data by age group did not affect the total result. Results for the 60+ group was significant for higher rates of emotional wellbeing correlated with zero - one hour of social media use, although the validity is questioned as there were only two participants in this age group (Table 8 and Figure 3).

Table 8

		Ν	М	SD	Kendall's t	р
18-29	Hours	25	2.2	1	0.0392	0.81
	E.H		12	1.93		
30-44	Hours	22	1.63	0.49	0.06	0.74
	E.H		11.63	2.38		
45-59	Hours	6	1.6	0.81	-0.32	0.4
	E.H		11.83	2.7		
60+	Hours	2	1	0		< 0.0001*
	E.H		13	1.41		
All	Hours	55	1.87	0.84	-0.03	0.78
	E.H		11.87	2.16		

Social Media Use and Emotional Health Sub-Scores (n=55)

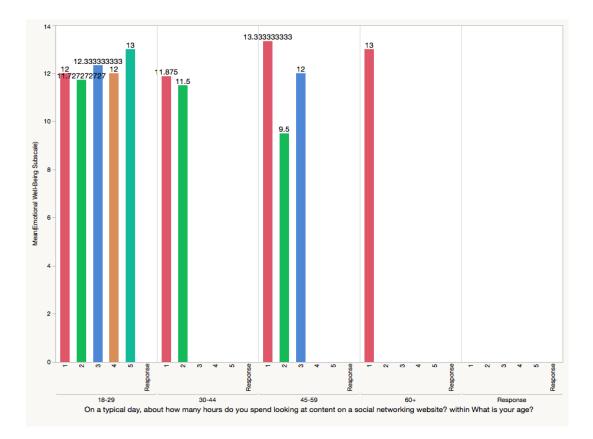


Figure 3. MHC-SF Emotional Well Being vs. Hours on SM by Age Group

## **Summary**

The first research question asked if there was relationship between work-related stress and the use of social media for nurses. The result for the 55 participants did not support a relationship, p=0.14, supporting the null hypothesis that there was not a relationship between work related stress and social media use in nurses. There was slight relationship of p=0.06 in the group of 18-29 year olds, partially supporting the alternative hypothesis that there was a relationship between work related stress and social media use. In this group work related stress scores decreased as social media use increased. The second research question asked if there was a relationship between social media use in

nurses and emotional wellbeing. The result was not significant to support a relationship, p=0.78, therefore the null hypothesis was supported that social media use and emotional quality of life do not have a relationship.

## **CHAPTER V**

#### Discussion

#### **Interpretation and Implication of Findings**

Study results indicated the need for more research on effects of work-related stress, social media use and emotional wellbeing of direct care nurses. Data and background from this research can be used to further direct research on social media influence and direct care nurses. There was a slight relationship between social media use and work related stress in the 18-29 year old group (p=0.06), although the sample size was small as there were only 25 respondents in that category. This needs further analysis, as this group had more of a relationship between data and this was the highest group of respondents (n=25). Also, this age group had the highest mean (m=2.2) and variation of social media use. Recent consumer research links 18-29 year olds to 97% use of social media in 2016, with 90% of these young adults having access to a smartphone. Social media has been found to play an important role in young adults' identity development in this stage of life, which could explain the high amount of use in this group (Villanti et al., 2017). There were no other significant relationships found with the research questions, which was limited due to a small sample size. Notably, there were two questions on the MHC-SF survey social subscale that had the lowest mean of scaled scores requiring further investigation. These questions were: (1) Society is becoming a better place for all people (mean= 2.2; about once a week) and (2) The way our society works makes sense to you (mean=2.07; about once a week). Exploring the social implications of social media use on the perception of human nature in nurses is indicated by this finding.

### **Limitations and Recommendations**

The purpose of this research was to gather information on a population that had not been studied much regarding their personal use of social media, whether this was influenced by the work-related stress they experienced, and if this use had an impact on emotional wellbeing. The questions on the Work-Related Stress Scale were structured to study faculty in academia (McCutcheon & Morrison, 2016). Perhaps these questions were not an adequate measure of the complex day-to-day stress that nurses encounter in direct care nursing. For example, the question that asked if respondents felt guilty when they were not at work had the lowest mean of 1.2. This may not have been an appropriate measure of the stress bedside nurses experience in contrast to faculty working in academia. McCutcheon and Morrison (2016), based this question on research that found mothers working in academia with children at home or with role conflicts were often faced by challenges meeting their research requirement during pre or post tenure, family support with career demands, and institutional support of working mothers. The MHC-SF was a good measure of wellbeing and the number of respondents scored themselves as moderately healthy.

Another limitation occurred in the recruitment strategy. The number of nurses was a good baseline for studying this population, but a larger pool of respondents would have given more varied results between age groups. This did not provide an opportunity to reach nurses outside of the local nursing organization. One may also question the type of nurse that was given access to this survey through the newsletter. The nurses taking this may have been more professionally happy in general, being involved in the nursing organization and at a good place in their career. Also, the survey may have been taken when the nurses were not at work and were relaxed in their personal lives.

In the future, a further analysis into demographics would help, like the department participants worked in, how many hours a week they worked, what shift they worked, how long they had been a nurse, and what time of day they typically used social media. Analysis of the perceptions of society in direct care nurses would be indicated by two questions on the social well-being subscale perhaps in a qualitative study to understand how this was shaped. While the Work Related Stress Scale may not have been the most appropriate scale to measure the intricate nature of direct care nursing stress, a linear relationship was found to higher rates of reported stress leading to lower scores on the MHC-SF, which is consistent with previous research into the impact stress has on nurse's quality of life.

#### **Application to Conceptual Framework**

Recognition of patterns that emerge from behaviors responsive to adaptations of stress as defined by Cognitive-Relational Theory can determine if the behavior is adaptive or maladaptive. This recognition can lead to evolved consciousness from unhealthy patterns defined by Theory of Health as Expanding Consciousness. Recognizing patterns that are maladaptive, the individual can sort through a period of disorganization and become conscious of the feeling, the behavior, and become adept to change and recognize new coping mechanisms that enlighten the person to their own behavior and response. This evolution makes the nurse able to help guide their patients through disorganized periods of health from a point of true understanding of these unhealthy patterns. Study results did not provide the evidence to support the hypothesis that use of social media in response to work related stress was adaptive or maladaptive as defined by scores on the emotional subscale of the MHC-SF. The findings were also limited by a small sample size (n=55).

## Conclusion

This research sought to find relationships between nurse stress, social media and emotional wellbeing in direct care nurses. While there was not enough data from a small sample size to establish a relationship in this study, more insight is needed to determine if social media use is adaptive or maladaptive and what kind of impact it has on perception of nurses. Also, additional research is needed to define the influence and impact social media could have over direct care nurses' perception. The relationship did exist in this study of higher rates of work related stress having a linear relationship with lower scores of general wellbeing, consistent with previous research done on the topic of nurse stress.

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## Appendix A

## **IRB** Approval

Dear Ms. Goodman and Dr. Mooring,

Your research study titled "Stress and Social Media: Implications for Nurses' Quality of Life" has been approved by the Gardner-Webb University Hunt School of Nursing's IRB for the period indicated. It has been determined that this study falls into the review category of Exempt.

Approval Date: 5/1/17 Expiration Date: 5/1/18

## Investigator's Responsibilities

Federal regulations require that all research be reviewed at least annually. It is the Principal Investigator's responsibility to submit for renewal and to obtain approval before the expiration date. You may not continue any research activity beyond the expiration date without IRB approval. Failure to receive approval for continuation before the expiration date will result in automatic termination of the approval for this study on the expiration date.

You are required to obtain IRB approval for any changes to any aspect of this study before they can be implemented. Should any adverse event or unanticipated problem involving risks to the participants or others occur, the events must be reported immediately to the Hunt School of Nursing IRB representative.

During your study, you must retain all instruments/forms/surveys and data. Prior to the presentation of your data within the Hunt School of Nursing Research Day, you must submit all instruments/forms/surveys along with your data to the IRB representative. Failure to submit this information prior to the presentation will result in an inability to present your findings and will impact your graduation date. Prior to graduation, it is the responsibility of the student and the advisor/chair to ensure that this IRB is closed using the appropriate form.

Please contact me with any questions. Best wishes on your research.

Sincerely, Cindy Miller, PhD, RN IRB Representative Hunt School of Nursing

## Appendix B

## Work-Related Stress Scale

Version Attached: Full Test

PsycTESTS Citation: McCutcheon, J. M., & Morrison, M. A. (2016). Work-Related Stress Scale [Database record]. Retrieved from PsycTESTS. doi: http://dx.doi.org/10.1037/t50657-000

Instrument Type: Inventory/Questionnaire

Test Format: The 4-item measure utilized a 7-point frequency scale (0 Never, 6 Always). Responses were summed to create a total scale score ranging from 0 to 24, with higher scores reflecting more frequent work-related stress.

Source: McCutcheon, Jessica M., & Morrison, Melanie A. (2016). "Eight days a week": A national snapshot of academic mothers' realities in Canadian psychology departments. Canadian Psychology/Psychologie canadienne, Vol 57(2), 92-100. doi: 10.1037/cap0000049

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PsycTESTSTM is a database of the American Psychological Association

doi: http://dx.doi.org/10.1037/t50657-000

## Work-Related Stress Scale

Items

- 1. The demands of my job make it difficult to be relaxed at home.
- 2. I feel overwhelmed by my workload.
- 3. I feel guilty when I'm not working
- 4. I have unrealistic time pressures in my job.

Note. Participants responded using a 7-point frequency scale (0 =Never; 1=Rarely; 2=Occasionally; 3=Sometimes; 4=Often; 5=Nearly always; 6=Always).

R <sup>G</sup> =			
Notifications			
Updates Messages Requests			
permission for use of scale	Report message • Block user	( Back to list	New message
Crystal Ann Goodman	11 days ago	Inbox	
Hi Ms. Morrison,		Sent	
I am a graduate student and am working on m Nursing. I am planning on distributing a surve nurse stress and coping mechanisms. I found Stress Scale on PSYCHinfo, and was seeking my survey. I have no intention to modify or ch Thank you for your time. Crystal Goodman	y to measure a few variables on I your survey Work-Related permission to use it in part of		
Melanie A Morrison to you	11 days ago		
Hello Crystal, Thank you for your message. Please feel free Scale in your research.	to use the Work-related Stress		
Best wishes for your project Crystal, Melanie			
Unarchive conversation			
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# Appendix C

# Work Related Stress Scale Survey on Survey Monkey®

Nurse Stress and Social Media
The purpose of this voluntary survey is to gather data being used in completion of a thesis for a Master's in Nursing Administration at Gardner-Webb University by the researcher. This study seeks to determine if there is a correlation between work-related stress and use of social media and between social media use and the nurse's emotional well-being. The survey should take approximately 15 minutes. Data will be used from survey responses towards completion of the Master's thesis. Participation in the study is completely voluntary, and you may close the browser window at any time if you no longer wish to participate. By completing the survey you are consenting to the use of the data for research purposes used in the thesis.
* 1. Are you a nurse working in direct patient care?
○ Yes
○ No
2. Are you male or female? Male Female
3. What is your age?
Under 18
0 18 - 29
30 - 44
45 - 59
60+
<ul> <li>4. On a typical day, about how many hours do you spend looking at content on a social networking website?</li> <li>0-1</li> <li>2-3</li> <li>4-5</li> <li>6-7</li> <li>More than 7</li> </ul>

5. What is your	most frequent	activity when usi	ng social media	?					
Seeing what f	riends are up to								
Catching up on current events (news, politics, etc.)									
Dating									
Professional [	Development/Nur	sing Organizations							
O Posting/Looki	ng at Pictures (ins	stagram, snapchat, fa	acebook, etc.)						
Pinterest pins									
Shopping									
Writing in a bl	og/Reading blog	(blogger, twitter, etc.)							
N/A- I don't us	se social media								
Work-Related	d Stress Sca	ale							
		1 1. 1999 I I							
6. The demands		ke it difficult to b	e relaxed at hon Sometimes	Often	Neerbuchuchuchuch	Alwaya			
Never	Rarely	Occasionally	Sometimes	Often	Nearly always	Always			
$\bigcirc$	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	$\bigcirc$			
7. I feel overwh	elmed by my v	vorkload.							
Never	Rarely	Occasionally	Sometimes	Often	Nearly always	Always			
0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$			
8. I feel guilty w									
Never	Rarely	Occasionally	Sometimes	Often	Nearly always	Always			
0	0	0	0	$\bigcirc$	0	0			
9. I have unreal	istic time pres	sures in my iob							
Never	Rarely	Occasionally	Sometimes	Often	Nearly always	Always			
$\bigcirc$	0	0	$\bigcirc$	$\bigcirc$	0	0			
McCutcheon, J. M.	, & Morrison, M. A	. (2016). Work-Rela	ed Stress Scale [Da	atabase					
record]. Retrieved	from PsycTESTS	. doi: http://dx.doi.org	/10.1037/t50657-00	0					
Mental Healt	h Continuun	n Short Form							

10. In the past month how often did you feel ...

	Never	Once or twice	About once a week	About two or three times a week	Almost every day	Every day
Нарру	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Interested in life	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Satisfied with life	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

## 11. During the past month, how often did you feel...

	Never	Once or twice	About once a week	About two or three times a week	Almost every day	Every day
That you had something important to contribute to society	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
That you belonged to a community (like a social group, or your neighborhood)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
That our society is a good place, or is becoming a better place for all people	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
That people are basically good	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
That the way our society works makes sense to you	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

	Never	Once or twice	About once a week	About two or three times a week	Almost every day	Every day
That you liked most parts of your personality	$\bigcirc$	$\bigcirc$	0	0	0	$\bigcirc$
Good at managing the responsibilities of your daily life	$\bigcirc$	$\bigcirc$	0	0	$\bigcirc$	$\bigcirc$
That you had warm and trusting relationships with others	$\bigcirc$	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	$\bigcirc$
That you had experiences that challenged you to grow and become a better person	0	0	$\bigcirc$	0	0	$\bigcirc$
Confident to think or express your own ideas and opinions	0	0	0	0	$\bigcirc$	0
That your life has a sense of direction or meaning to it eyes, C.L.M. (2009). Brief dr www.sociology.emory.edu/cke		he mental health co	ontinuum short for	n (MHC-SF). Retr	ieved from:	0
sense of direction or meaning to it eyes, C.L.M. (2009). Brief de		he mental health co	O.	n (MHC-SF). Retr	ieved from:	0

#### Appendix D

## Mental Health Continuum Short Form

#### Brief Description of the Mental Health Continuum Short Form (MHC-SF)\*

The short form of the Mental Health Continuum (MHC-SF) is derived from the long form (MHC-LF), which consisted of seven items measuring emotional well-being, six 3-item scales (or 18 items total) that measured the six dimensions of Ryff's (1989) model of psychological well-being, and five 3-item scales (or 15 items total) that measure the five dimensions of Keyes' (1998) model of social well-being. The measure of emotional well-being in the MHC-LF included six items measuring the frequency of positive affect that was derived, in part, from Bradburn's (1969) affect balance scale, and a single item of the quality of life overall based on Cantril's (1965) self-anchoring items. The estimates of internal consistency reliability for each of the three sets of measures—emotional, psychological, and social well-being—in the MHC short and long forms have all been high (> .80; see e.g., Keyes, 2005a). The MHC-LF form measures of social and psychological well-being have been validated (see Keyes, 1998; Ryff, 1989, Ryff & Keyes, 1995) and used in hundreds of studies over the past two decades, and their use as a measure of overall positive mental health was first introduced by Keyes (2002) and recently summarized in Keyes (2007).

While the MHC-LF consisted of 40 items, the MHC-SF consists of 14 items that were chosen as the most prototypical items representing the construct definition for each facet of well-being. Three items were chosen (happy, interested in life, and satisfied) to represent emotional well-being, six items (one item from each of the 6 dimensions) were chosen to represent psychological well-being. The response option for the short form was changed to measure the frequency with which respondents experienced each symptom of positive mental health, and thereby provided a clear standard for the assessment and a categorization of levels of positive mental health that was similar to the standard used to assess and diagnosis major depressive episode (see Keyes, 2002, 2005a, 2007). To be diagnosed with *flourishing* mental health, individuals must experience 'every day' or 'almost every day' at least one of the three signs of hedonic well-being and at least six of the eleven signs of positive functioning during the past month. Individuals who exhibit low levels (i.e., 'never' or 'once or twice' during the past month) on at least one measure of hedonic well-being and low levels on at least six measures of positive functioning are diagnosed with *languishing* mental health. Individuals who are neither flourishing nor languishing are diagnosed with *moderate* mental health. Individuals who are neither flourishing nor languishing are diagnosed with *moderate* mental health.

The short form of the MHC has shown excellent internal consistency (> .80) and discriminant validity in adolescents (ages12-18) and adults in the U.S., in the Netherlands, and in South Africa (Keyes, 2005b, 2006; Keyes et al., 2008; Lamers et al., 2011; Westerhof & Keyes, 2009). The 4-week test-retest reliability estimates for the long form scales ranging from .57 for the overall psychological well-being domain, (a 4 for the overall emotional well-being domain, to .71 for the overall social well-being domain (Robitschek & Keyes, 2006, 2009). The test-retest reliability of the MHC-SF over three successive 3 month periods averaged .68 and the 9 month test-retest was .65 (Lamers et al., 2011). The three factor structure of the long and short forms of the MHC—emotional, psychological, and social well-being—has been confirmed in nationally representative samples of US adults (Gallagher, Lopez & Preacher, 2009), college students (Robitschek & Keyes, 2009), and in a nationally representative sample of adolescents between the ages of 12 and 18 (Keyes, 2005b, 2009) as well as in South Africa (Keyes et al., 2008) and the Netherlands (Lamers et al., 2011)

Please contact Dr. Keyes (ckeyes@emory.edu) if you require the MHC-SF in a language other than English, or would like to translate and validate the MHC-SF in your country and culture.

<sup>\*</sup>Although copyrighted, the MHC-SF may be used as long as proper credit is given. Permission is not needed to use the measure and requests to use the measure will not be answered on an individual basis because permission is granted here, and this note provides evidence that permission has been granted. Proper citation of this document: Keyes, C. L. M. (2009). Atlanta: *Brief description of the mental health continuum short form (MHC-SF)*. Available: <u>http://www.sociology.emory.edu/ckeyes/</u>. [On-line, retrieved].

Adult MHC-SF (ages 18 or older)

Please answer the following questions are about how you have been feeling during the past month. Place a check mark in the box that best represents how often you have experienced or felt the following:

During the past month, how often did you feel	NEVER	ONCE OR TWICE	ABOUT ONCE A WEEK	ABOUT 2 OR 3 TIMES A WEEK	ALMOST EVERY DAY	EVERY DAY
1. happy						
2. interested in life						
3. satisfied with life						
4. that you had something important to contribute to society						
5. that you belonged to a community (like a social group, or your neighborhood)						
SEE BELOW 6. that our society is a good place, or is becoming a better place, for all people						
7. that people are basically good						
8. that the way our society works makes sense to you						
9. that you liked most parts of your personality						

10. good at managing the responsibilities of your daily life				
11. that you had warm and trusting relationships with others	-	-		
12. that you had experiences that challenged you to grow and become a better person				
13. confident to think or express your own ideas and opinions				
14. that your life has a sense of direction or meaning to it	-			

Note: The original wording for item 6 was "that our society is becoming a better place for people like you." This item does not work in all cultural contexts. However, when validating the MHC-SF, test both versions of item 6 to see which one works best in your context.